CDX-MP70

SERVICE MANUAL

Ver 1.0 2002. 02

US Model
Canadian Model
AEP Model
UK Model

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-550M-156
Optical Pick-up Name	DAX-23E

AUDIO POWER SPECIFICATIONS (US Model)
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

SPECIFICATIONS

CD player section

Signal-to-noise ratio	95 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 107.9 MHz (US, Canadian Model) 87.5 – 108.0 MHz (AEP, UK Model)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM (US, Canadian Model)

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

MW/LW (AEP, UK Model)

Tuning range	MW : 531 – 1,602 kHz LW : 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	MW : 30 µV LW : 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W × 4 (at 4 ohms)

General

Outputs	Audio outputs (front/rear) Subwoofer output (mono) Power antenna relay control terminal Power amplifier control terminal
Inputs	Telephone ATT control terminal Illumination control terminal BUS control input terminal BUS audio input terminal AUX IN terminal Remote controller input terminal Antenna input terminal
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Loudness	+8 dB at 100 Hz +2 dB at 10 kHz

– Continued on next page –

FM/AM COMPACT DISC PLAYER

US, Canadian Model

FM/MW/LW COMPACT DISC PLAYER

AEP, UK Model

9-873-558-01
2002B0400-1
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Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 182 mm (7 1/8 × 2 × 7 1/4 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (7 1/4 × 2 1/8 × 6 3/8 in.) (w/h/d)
Mass	Approx. 1.6 kg (3 lb. 9 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Card remote commander RM-X112 (US, Canadian Model)

Note

This unit cannot be connected to a digital preamplifier or an equalizer.

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

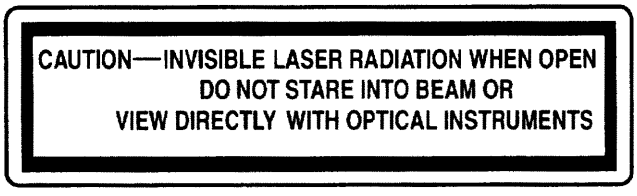
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

- AEP, UK model

This label is located on the bottom of the chassis.



This label is located on the drive unit's internal chassis.

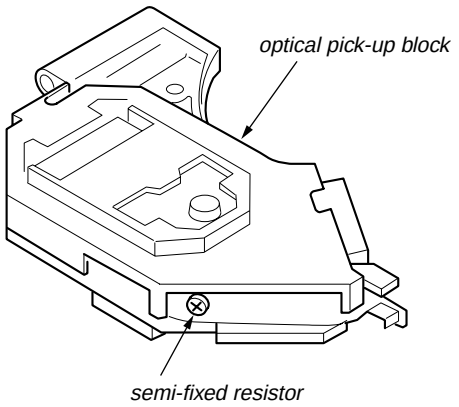
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



TEST DISCS

This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2501-063-1)
CD-RW test disc TCD-W082L (Part No. J-2501-063-2)

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

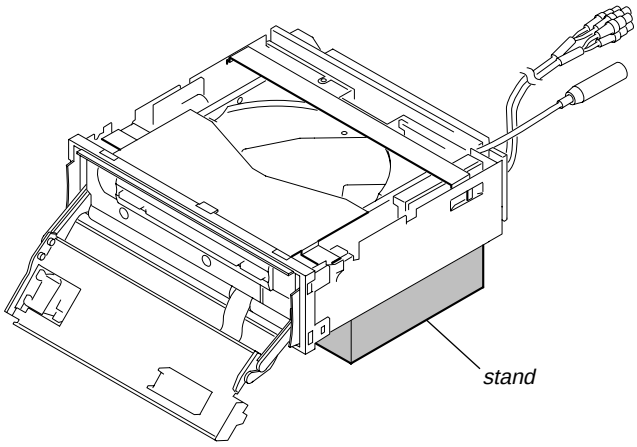
- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
- A CD-R/CD-RW to which a session can be added can be played.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

NOTE FOR THE OPENING OF THE FRONT PANEL

In this set, the front panel is lowered to below the bottom face when it is opened.

When servicing the set, place it on a stand having a height of about 2 cm.



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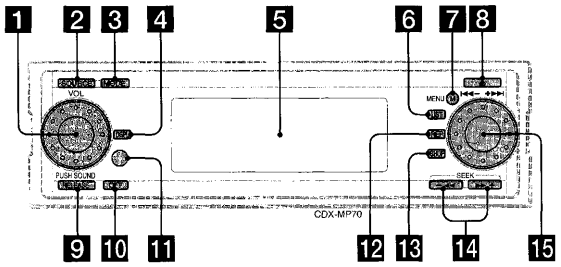
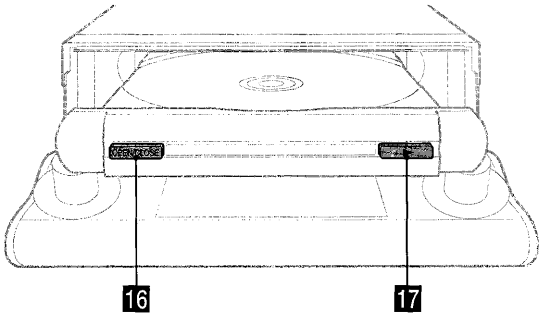
SECTION 1
GENERAL

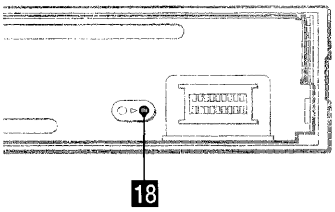
This section is extracted from instruction manual.

Location of controls (US, Canadian Model)





Behind the front panel

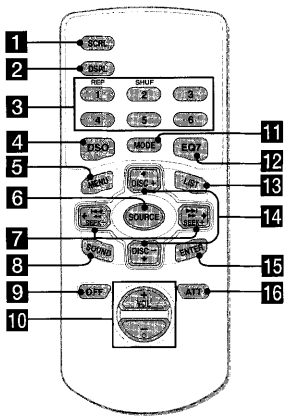


Refer to the pages listed for details.

1 **VOL (volume) control dial/SOUND button**
Rotate to:
– Adjust the volume.
– Adjust the sound setting.
Press to:
– Select the sound setting.
2 **SOURCE button**
To select the source.
3 **MODE button**
To change the operation.
4 **DSPL button** 13, 14, 26
5 **Display window**
6 **LIST button** 12, 14, 15, 17, 18
7 **MENU button**
To display the menus.
8 **⏏ (eject) button** 11, 12
9 **RELEASE button** 10
10 **OFF (Stop/Power off) button*** 10, 12, 25, 26
11 **Receptor for the card remote commander and wireless rotary commander**
12 **REP button** 13
13 **SHUF button** 13
14 **◀◀/▶▶ (SEEK –/+) buttons**
To fast-forward, reverse a track, tune in stations automatically, find a station manually, and select a setting.
15 **I◀◀/▶▶I (–/+) control dial**
Rotate to:
– Receive preset stations.
– Skip tracks.
– Select a menu.
Press to:
– Enter a setting.
16 **OPEN/CLOSE button** 10, 11
17 **► (play) button** 11
18 **RESET button** 9

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and causes battery drain.

Card remote commander RM-X112



The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 **SCRL button**
2 **DSPL button**
3 **Number buttons**
4 **DSO button**
5 **MENU button**
6 **SOURCE button**
7 **SEEK (◀◀/▶▶) buttons**
8 **SOUND button**
9 **OFF button**
10 **VOL (+/–) buttons**
11 **MODE button**
12 **EQ7 button**
13 **LIST button**
14 **DISC/ALBUM (▲/▼) buttons**
15 **ENTER button**
16 **ATT button**

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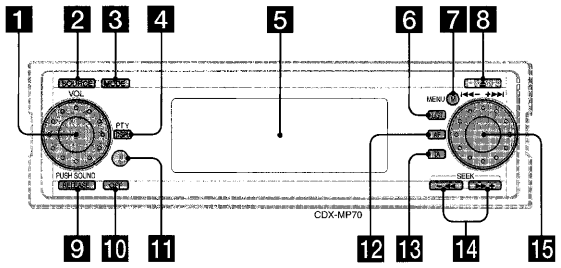
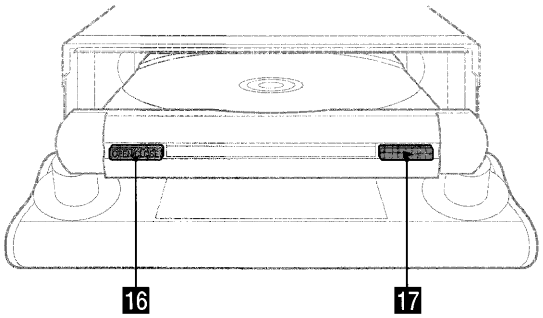
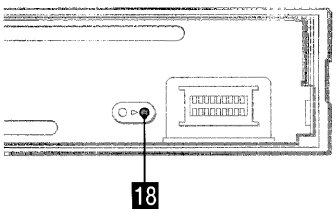
Location of controls (AEP, UK Model)





Behind the front panel

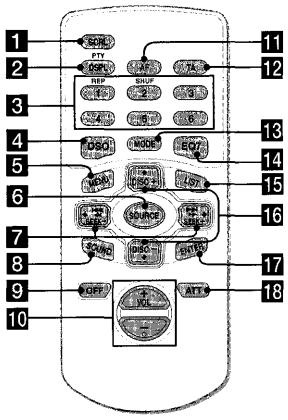


Refer to the pages listed for details.

1 **VOL (volume) control dial/SOUND button**
Rotate to:
– Adjust the volume.
– Adjust the sound setting.
Press to:
– Select the sound setting.
2 **SOURCE button**
To select the source.
3 **MODE button**
To change the operation.
4 **DSPL/PTY button** 13, 15, 18, 21, 29
5 **Display window**
6 **LIST button** 12, 15, 17
7 **MENU button**
To display the menus.
8 **⏏ (eject) button** 11, 12
9 **RELEASE button** 10
10 **OFF (Stop/Power off) button*** 10, 12, 29, 30
11 **Receptor for the card remote commander and wireless rotary commander**
12 **AF button** 18, 20
13 **TA button** 19, 20
14 **◀◀/▶▶ (SEEK –/+) buttons**
To fast-forward, reverse a track, tune in stations automatically, find a station manually, and select a setting.
15 **I◀◀/▶▶I (–/+) control dial**
Rotate to:
– Receive preset stations.
– Skip tracks.
– Select a menu.
Press to:
– Enter a setting.
16 **OPEN/CLOSE button** 10, 11
17 **► (play) button** 11
18 **RESET button** 9

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.
Otherwise, the clock display does not turn off and causes battery drain.

Card remote commander RM-X113 (optional)



The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 **SCRL button**
2 **DSPL/PTY button**
3 **Number buttons**
4 **DSO button**
5 **MENU button**
6 **SOURCE button**
7 **SEEK (◀◀/▶▶) buttons**
8 **SOUND button**
9 **OFF button**
10 **VOL (+/–) buttons**
11 **AF button**
12 **TA button**
13 **MODE button**
14 **EQ7 button**
15 **LIST button**
16 **DISC/ALBUM (▲/▼) buttons**
17 **ENTER button**
18 **ATT button**

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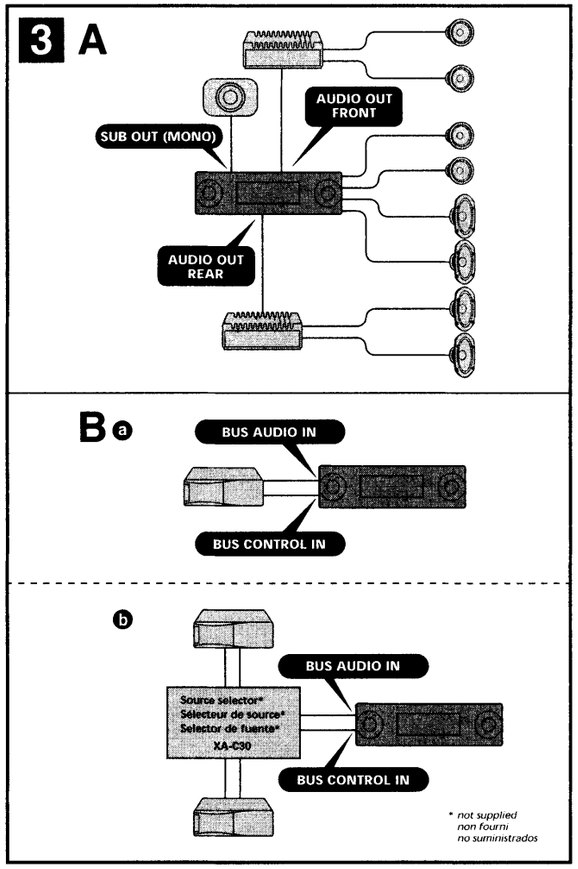
Connections (US, Canadian Model)



Connection example (3)

Note **(3-A)**
Be sure to connect the ground cord before connecting the amplifier.

Tip **(3-B-b)**
For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Exemple de raccordement (3)

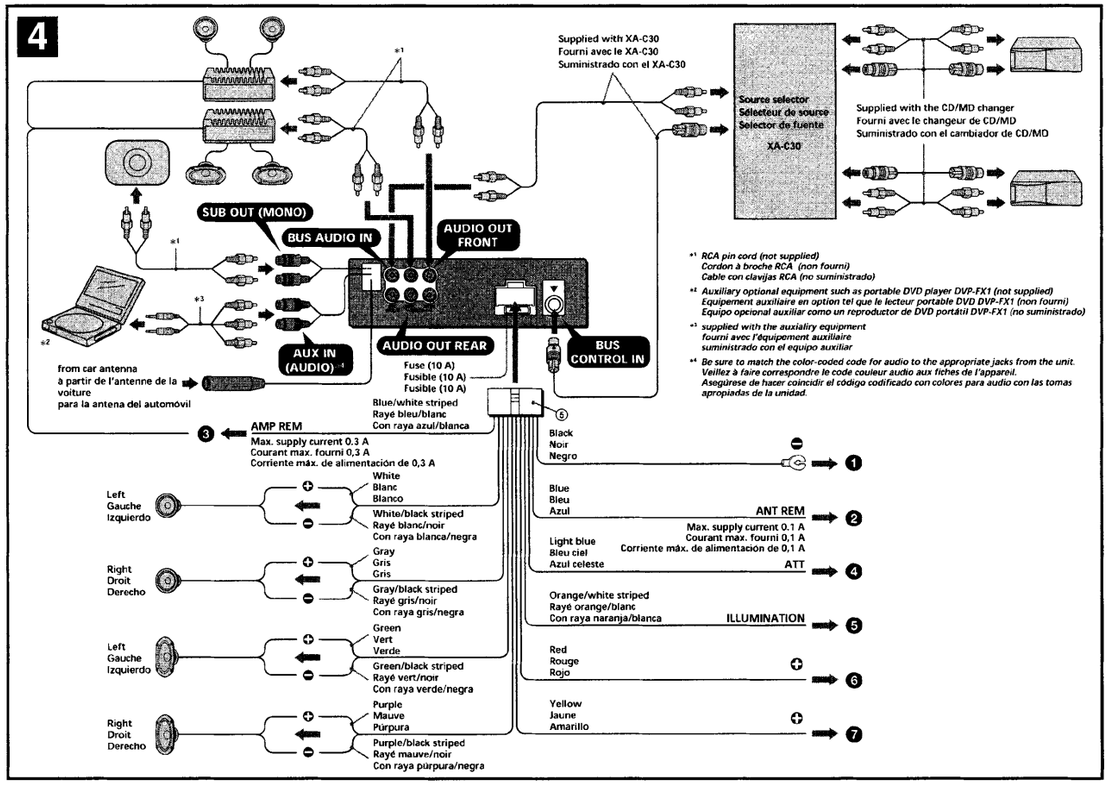
Remarque **(3-A)**
Raccordez d'abord le fil de masse avant de raccorder l'amplificateur.

Conseil **(3-B-b)**
Dans le cas du raccordement de deux changeurs de CD/MD ou plus, le sélecteur de source XA-C30 (en option) est indispensable.

Ejemplo de conexiones (3)

Nota **(3-A)**
Asegúrese de conectar primero el cable de puesta a masa antes de realizar la conexión al amplificador.

Consejo **(3-B-b)**
Si desea conectar dos o más cambiadores de CD/MD, necesitará el selector de fuente XA-C30 (opcional).



Connection diagram (4)

❶ To a metal surface of the car
First connect the black ground lead, then connect the yellow and red power input leads.

❷ To the power antenna control lead or power supply lead of antenna booster amplifier
Notes
- *It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ To the interface cable of a car telephone

❺ To a car's illumination signal
Be sure to connect the black ground lead to it first.

❻ To the +12 V power terminal which is energized in the accessory position of the ignition key switch
Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energised at all times.*
  Be sure to connect the black ground lead to it first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❼ To the +12 V power terminal which is energised at all times
Be sure to connect the black ground lead to it first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Schéma de raccordement (4)

❶ À un point métallique de la voiture
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

❷ Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne
Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

❸ Vers AMP REMOTE IN de l'amplificateur de puissance en option
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ Vers le câble d'interface d'un téléphone de voiture

❺ Au signal d'éclairage de la voiture
Raccordez d'abord le fil de masse noir.

❻ À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires
Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir "Remarques sur les fils de commande et d'alimentation".*

❼ À la borne +12 V qui est alimentée en permanence
Raccordez d'abord le fil de masse noir.

Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de +12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou le fil d'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité de manipulation adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleur au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Diagramas de conexión (4)

❶ A una superficie metálica del automóvil
Conecte primero el cable de masa negro, y después los cables amarillo y rojo de entrada de alimentación.

❷ Para conectar al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de antena
Notas
- *Si no se dispone de antena motorizada ni de amplificador de antena, si utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ Para conectar a AMP REMOTE IN del amplificador de potencia opcional
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ Para conectar al cable de interfaz de un teléfono para automóvil

❺ A una señal de iluminación del automóvil
Asegúrese de conectar primero el cable de masa negro.

❻ Para conectar al terminal de alimentación de +12 V que recibe energía en la posición de accesorios del interruptor de la llave de encendido
Notas
- *Si no hay posición de accesorios, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de masa negro.
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero/lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❼ Para conectar al terminal de alimentación de +12 V que recibe energía sin interrupción
Asegúrese de conectar primero el cable de masa negro.

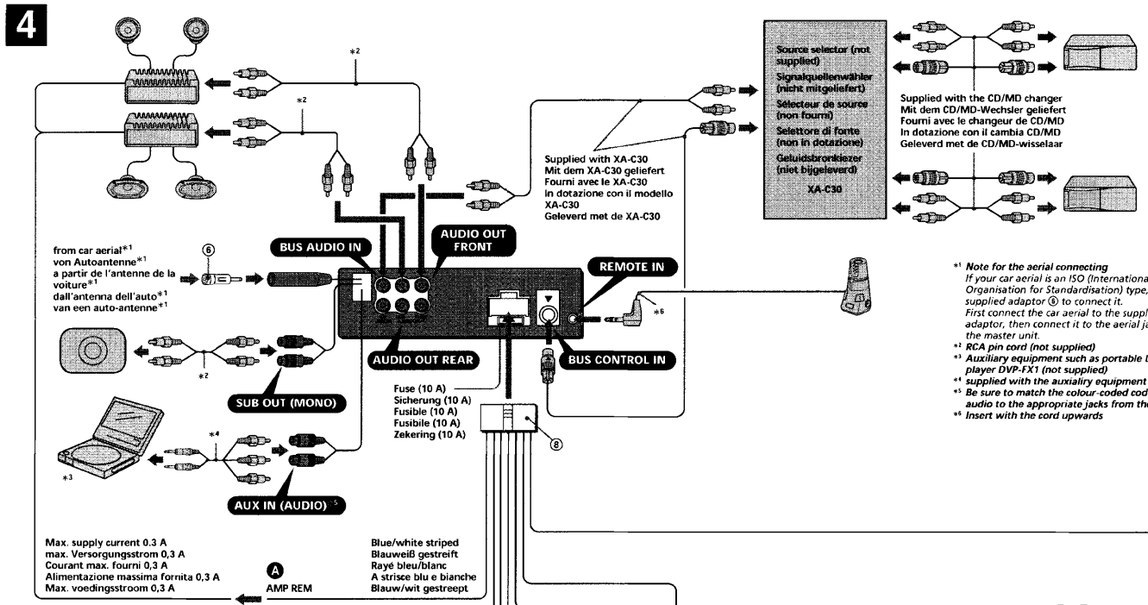
Notas sobre los cables de control y de fuente de alimentación
- *El conductor de control de la antena motorizada (azul) suministrará cc +12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero/lateral, conecte el cable de control de antena motorizada (azul) o el cable de entrada de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener información detallada, consulte a su proveedor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de puesta a tierra de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si el unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Connections (AEP, UK Model)

4



*1 **Note for the aerial connecting**
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor Ⓑ to connect it.
First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
*2 **RCA pin cord (not supplied)***
*3 **Auxiliary equipment such as portable DVD player DVP-FX1 (not supplied)***
*4 **supplied with the auxiality equipment***
*5 **Be sure to match the colour-coded code for audio to the appropriate jacks from the unit.***
*6 **Insert with the cord upwards***

*1 **Hinweis zum Anschließen der Antenne**
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mit Hilfe des mitgelieferten Adapters Ⓑ an.
Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
*2 **Cinchkabel (nicht mitgeliefert)***
*3 **Zusätzliche Geräte wie z. B. der tragbare DVD-Player DVP-FX1***
*** **mit den Zusatzgeräten mitgeliefert***
*5 **Achten Sie darauf, das farbcodierte Audiokabel mit den richtigen Buchsen am Gerät zu verbinden.***
*6 **Mit dem Kabel nach oben einsetzen***

*1 **Remarque sur le raccordement de l'antenne***
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni Ⓑ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
*2 **Cordon à broche RCA (non fourni)***
*3 **Appareil auxiliaire tel que le lecteur portable DVD DVP-FX1 (non fourni)***
*4 **fourni avec l'appareil auxiliaire***
*5 **Veillez à faire correspondre le code couleur audio aux fiches de l'appareil.***
*6 **Insérez avec le câble vers le haut***

*1 **Nota per il collegamento dell'antenna***
Se l'antenna della macchina è di tipo ISO (International Organization Standardization), utilizzare l'adattatore Ⓑ in dotazione per collegarla.
Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
*2 **Cavo a piedini RCA (non in dotazione)***
*3 **Apparecchio opzionale ausiliario quale il lettore DVD portatile DVP-FX1***
*4 **in dotazione con l'apparecchio ausiliario***
*5 **Assicurarsi che i cavi differenziati in base al colore per l'audio corrispondano alle prese appropriate dell'apparecchio.***
*6 **Inserire con il cavo rivolto verso l'alto***

*1 **Opmerking bij de antenne-aansluiting***
Indien uw wagen is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adaptor Ⓑ.
Sluit eerst de auto-antenne aan op de meegeleverde adaptor en vervolgens de antennestekker op het hoofdtoestel.
*2 **Tulpstekkersnoer (niet bijgeleverd)***
*3 **Los verkrijgbare apparatuur zoals de draagbare DVD-speler DVP-FX1 (niet bijgeleverd)***
*4 **meegeleverd met de los verkrijgbare apparatuur***
*5 **Zorg ervoor dat de kleurcode voor audio overeenkomt met de betreffende aansluitingen op het toestel.***
*6 **Inbrengen met het snoer naar boven***

See "Power Connection diagram" on the reverse side for details.
Näheres dazu finden Sie im "Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le "Schéma de connexion d'alimentation" au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.

4	Yellow Gelb Jaune Giallo Geel	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding	7	Red Rot Rouge Rosso Rood	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5	Blue Blau Bleu Blu Blauw	power aerial control Motorantennen-Steuerleitung antenne électrique comando dell'antenna elettrica automatische antenne	8	Black Schwarz Noir Nero Zwart	earth Masse masse terra aarding
6	Orange/White Orange-weiß gestreift Rayé orange/blanc Arancione/bianco Oranje/wit	switched illumination power supply geschaltete Beleuchtungsstromversorgung alimentation de l'éclairage commutée alimentazione a illuminazione commutata geschakelde verlichting stroomvoorziening			

Positions 1, 2 and 3 do not have pins.
An Position 1, 2 and 3 befinden sich keine Stifte.
Les positions 1, 2 et 3 ne comportent pas de broches.
Le posizioni 1, 2 e 3 non hanno piedini.
De posities 1, 2 en 3 hebben geen pins.

1	Purple Violett Mauve Viola Paars	+	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	5	White Weiß Blanc Bianco Wit	+	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
2		–	Speaker, Rear, Right Lautsprecher hinten rechts haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts	6		–	Speaker, Front, Left Lautsprecher vorne links haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
3	Grey Grau Gris Grigio Grijs	+	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	7	Green Grün Vert Verde Groen	+	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
4		–	Speaker, Front, Right Lautsprecher vorne rechts haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts	8		–	Speaker, Rear, Left Lautsprecher hinten links haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links

Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De negatieve posities 2, 4, 6 en 8 hebben gestreepte kabels.

Connection diagram (4)

A To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.
B To the interface cable of a car telephone

Warning

If you have a power aerial without a relay box, connecting this unit with the supplied power connecting cord Ⓑ may damage the aerial.

Notes on the control leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

Anschlussdiagramm (4)

A An AMP REMOTE IN des gesondert erhältlichen Endverstärkers
Dieser Anschluss ist ausschließlich für Verstärker gedacht. Schließen Sie nichts anderes daran an. Andernfalls kann das Gerät beschädigt werden.
B An Schnittstellenkabel eines Autotelefons

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel Ⓑ die Antenne beschädigt werden.

Hinweise zu den Steuerleitungen
- *Die Motorantennen-Steuerleitung (blau) liefert + 12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzen) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

Stromversorgung des Speichers
Wenn das gelbe Stromversorgungskabel angeschlossen ist, wird der Speicher stets (auch bei ausgeschalteter Zündung) mit Strom versorgt.

Hinweise zum Lautsprecheranschluss
- *Schalten Sie das Gerät aus, bevor Sie die Lautsprecher anschließen.*
- *Verwenden Sie Lautsprecher mit einer Impedanz zwischen 4 und 8 Ohm und ausreichender Belastbarkeit. Ansonsten können die Lautsprecher beschädigt werden.*
- *Verbinden Sie die Lautsprecheranschlüsse nicht mit dem Wagenchassis und verbinden Sie auch nicht die Anschlüsse des rechten mit denen des linken Lautsprechers.*
- *Verbinden Sie die Masseleitung dieses Geräts nicht mit dem negativen (–) Lautsprecheranschluss.*
- *Versuchen Sie nicht, Lautsprecher parallel anzuschließen.*
- *An die Lautsprecheranschlüsse dieses Geräts dürfen nur Passivlautsprecher angeschlossen ,Erden. Schließen Sie keine Aktivlautsprecher (Lautsprecher mit eingebauten Verstärkern) an, da diese sonst beschädigt werden können.*
- *Um Fehlfunktionen zu vermeiden, verwenden Sie nicht die im Fahrzeug installierten, integrierten Lautsprecherleitungen, wenn am Ende eine gemeinsame negative (–) Leitung für den rechten und den linken Lautsprecher verwendet wird.*
- *Verbinden Sie nicht die Lautsprecherkabel des Geräts miteinander.*

Schéma de raccordement (4)

A Vers AMP REMOTE IN d'un amplificateur de puissance en option
Ce raccordement existe seulement pour les amplificateurs. Le raccordement à tout autre système peut endommager l'appareil.
B Vers le câble d'interface d'un téléphone de voiture

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du cordon d'alimentation fourni Ⓑ risque d'endommager l'antenne.

Remarques sur les fils de commande
- *Le fil de commande (bleu) de l'antenne électrique assure une alimentation de +12 V CC lorsque vous mettez la radio sous tension ou lorsque vous activez la fonction AF (fréquence secondaire) ou TA (messages de radioguidage).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW/LW intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou le fil d'entrée d'alimentation des accessoires (rouge) à la borne de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité de manipulation adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) du haut-parleur.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Schema di collegamento (4)

A A AMP REMOTE IN di un amplificatore di potenza opzionale
Questo collegamento è riservato esclusivamente agli amplificatori. Non collegare un tipo di sistema diverso onde evitare di causare danni all'apparecchio.
B Al cavo interfaccia di un telefono per auto

Avvertenza

Quando si collega l'apparecchio con il cavo di collegamento dell'alimentazione in dotazione Ⓑ, si potrebbe danneggiare l'antenna elettrica se questa non ha la scatola di relè.

Note sui cavi di controllo
- *Il cavo di controllo dell'antenna elettrica (blu) fornisce corrente continua +12 V CC quando si accende il sintonizzatore o quando si attiva la funzione AF (frequenza alternativa) o TA (notiziario sul traffico).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione opzionale al terminale di alimentazione del preamplificatore dell'antenna esistente. Per ulteriori informazioni, consultare il proprio fornitore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria
Quando il cavo di ingresso alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando la chiavetta di accensione è spenta.

Note sul collegamento dei diffusori
- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venir danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (-) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Non collegare alcun diffusore attivo (con amplificatore incorporato) ai terminali dei diffusori dell'apparecchio perché si potrebbero danneggiare i diffusori attivi. Assicurarsi di collegare diffusori passivi a questi terminali.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se il terminale dell'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Aansluitschema (4)

A Naar AMP REMOTE IN van een los verkrijgbare vermogensversterker
Deze aansluiting is alleen bedoeld voor versterkers. Door een ander systeem aan te sluiten kan het toestel worden beschadigd.
B Naar het interface-snoer van een autotelefoon

Opgelet

Indien u een elektrische antenne heeft zonder relaiskast, kan het aansluiten van deze eenheid met het bijgeleverde netsnoer Ⓑ de antenne beschadigen.

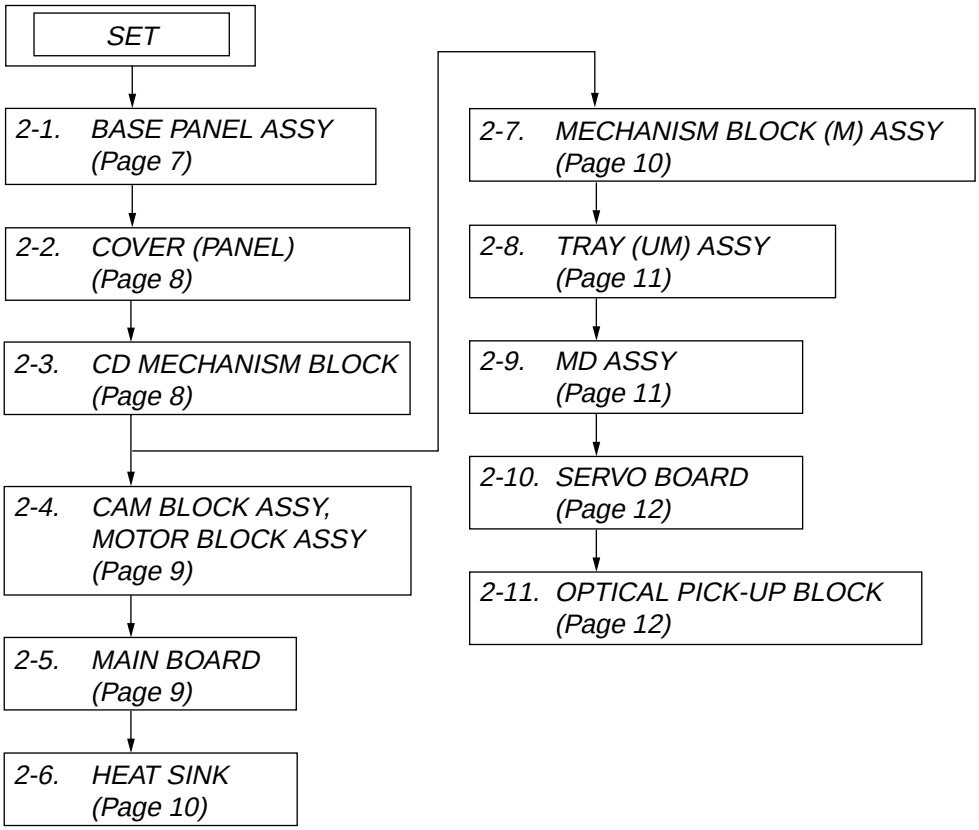
Opmerking betreffende de aansluitsnoeren
- *De voedingskabel (blauw) van de elektrisch bediende antenne levert +12V gelijkstroom wanneer u de tuner aanschakelt of de functie AF (Alternative Frequency) of TA (Traffic Announcement) activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruitvoorruit, moet u de antennevoedingskabel (blauw) of de hulpvoedingskabel (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.*

Instandhouden van het geheugen
Zolang de gele stroomdraad is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer het contact van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers
- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.*
- *Verbind de massakabel van dit toestel niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidspreker-aansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus altijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter en linker luidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

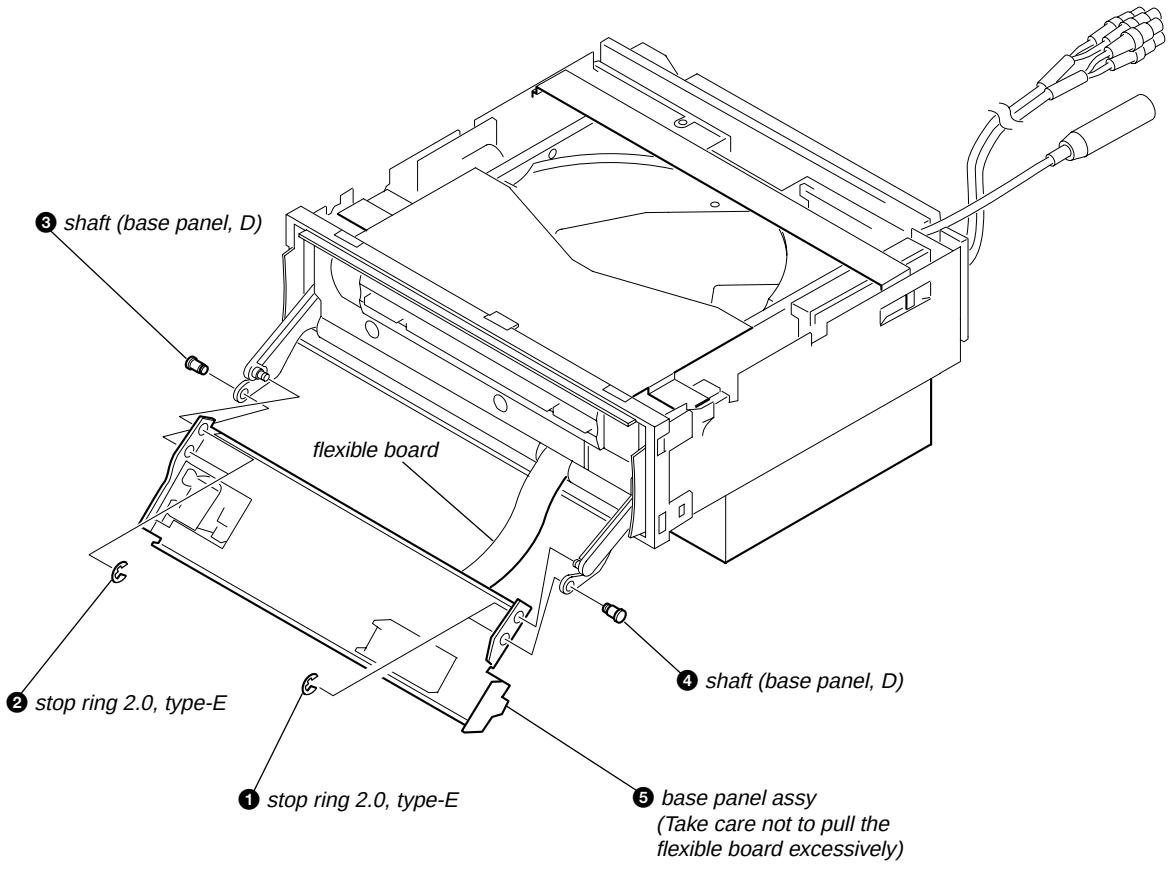
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

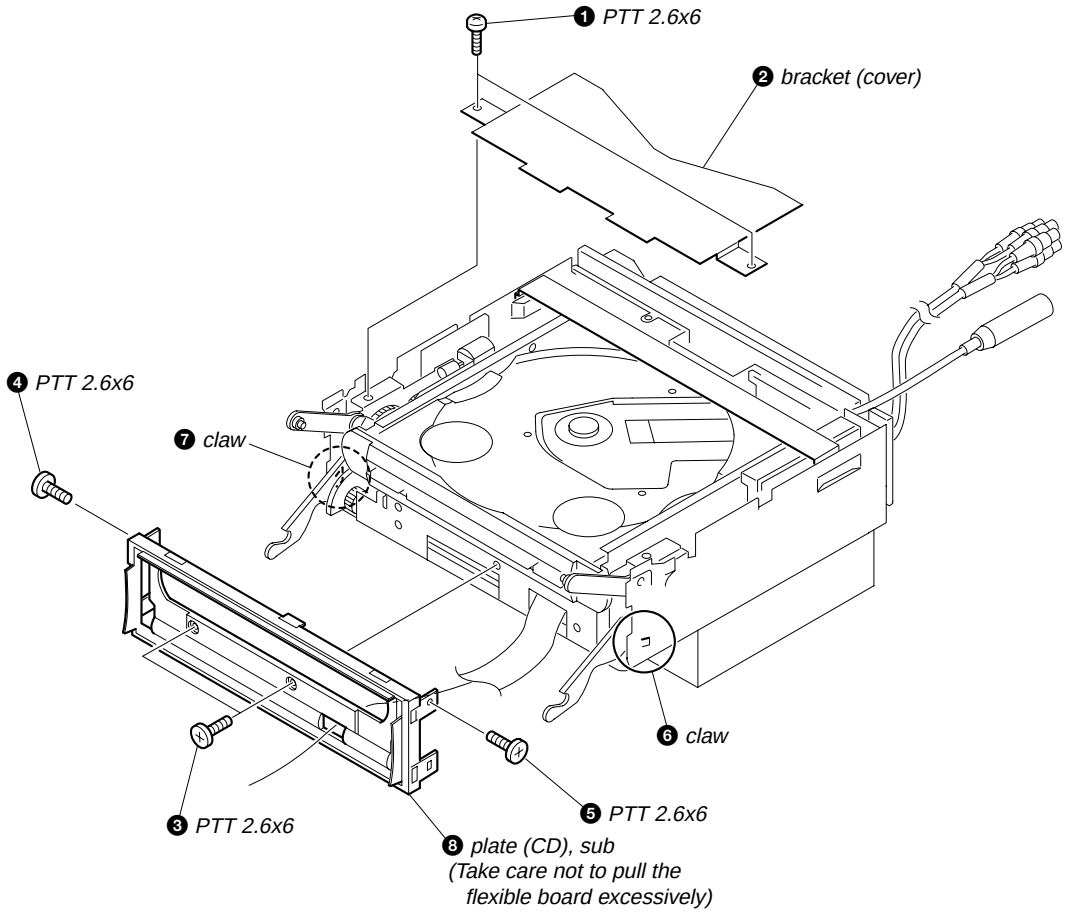

SET
2-1. BASE PANEL ASSY (Page 7)
2-2. COVER (PANEL) (Page 8)
2-3. CD MECHANISM BLOCK (Page 8)
2-4. CAM BLOCK ASSY, MOTOR BLOCK ASSY (Page 9)
2-5. MAIN BOARD (Page 9)
2-6. HEAT SINK (Page 10)
2-7. MECHANISM BLOCK (M) ASSY (Page 10)
2-8. TRAY (UM) ASSY (Page 11)
2-9. MD ASSY (Page 11)
2-10. SERVO BOARD (Page 12)
2-11. OPTICAL PICK-UP BLOCK (Page 12)

Note : Follow the disassembly procedure in the numerical order given.

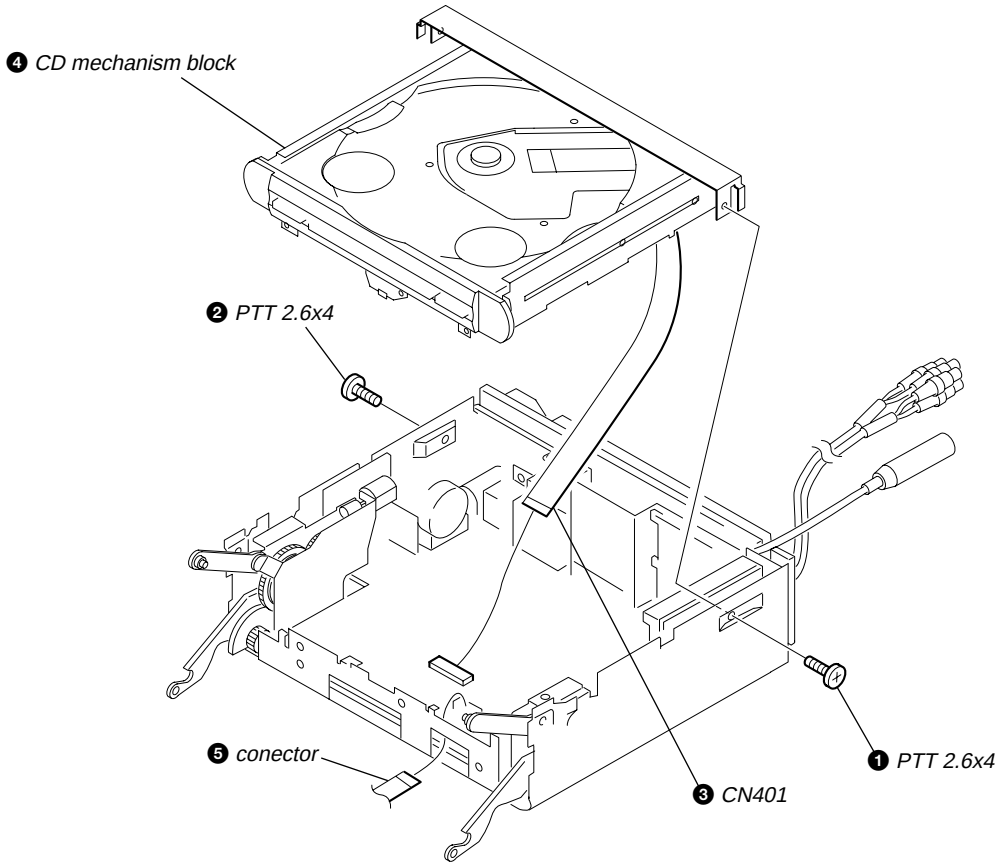
2-1. BASE PANEL ASSY


❸ shaft (base panel, D)
flexible board
❷ stop ring 2.0, type-E
❹ shaft (base panel, D)
❶ stop ring 2.0, type-E
❺ base panel assy
(Take care not to pull the flexible board excessively)

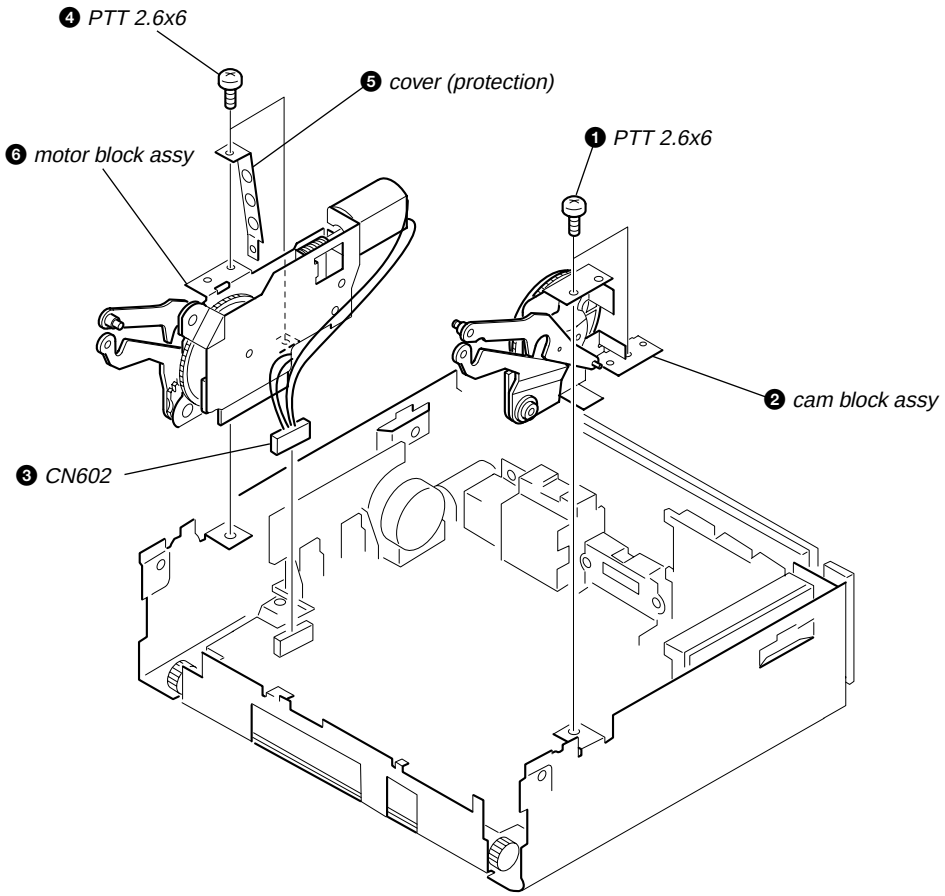
2-2. COVER (PANEL)



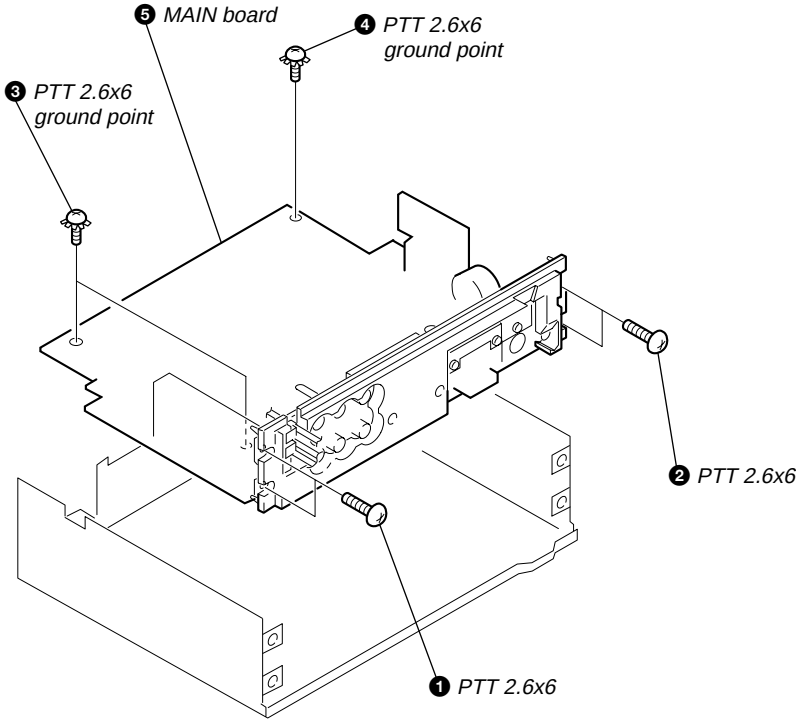
2-3. CD MECHANISM BLOCK



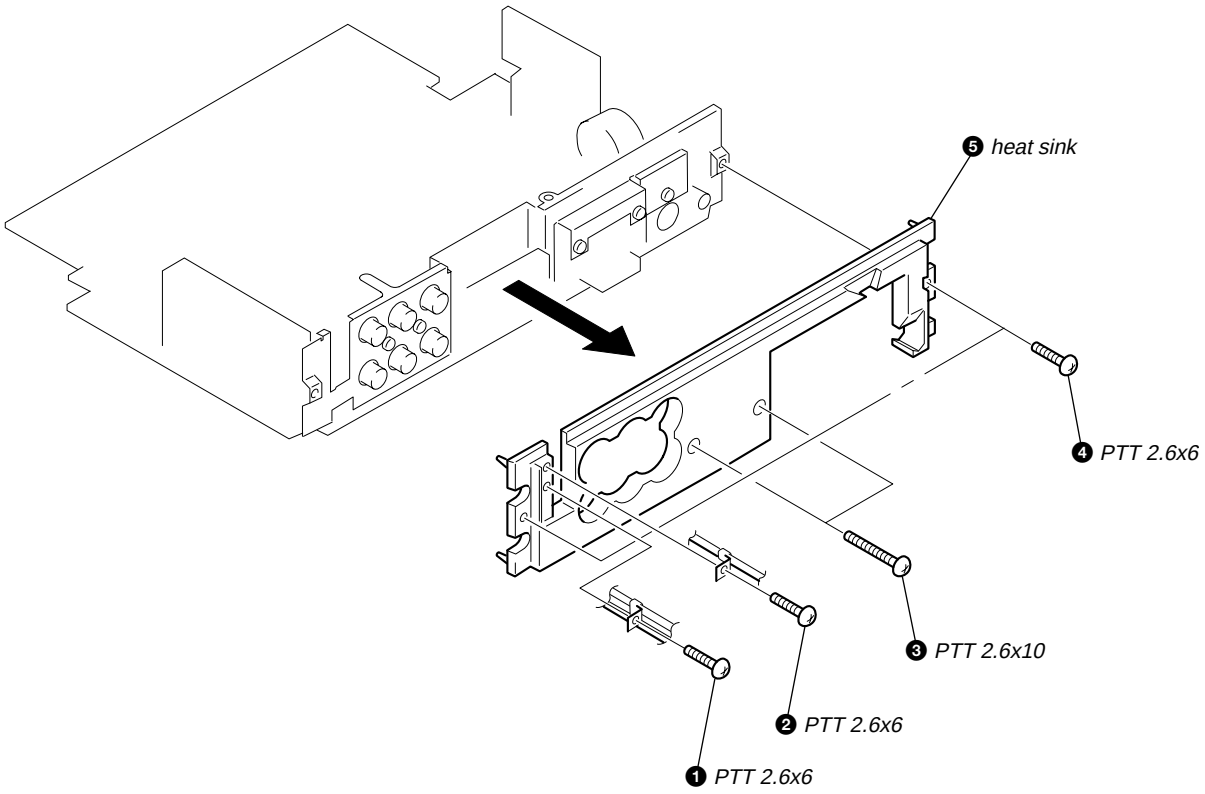
2-4. CAM BLOCK ASSY, MOTOR BLOCK ASSY



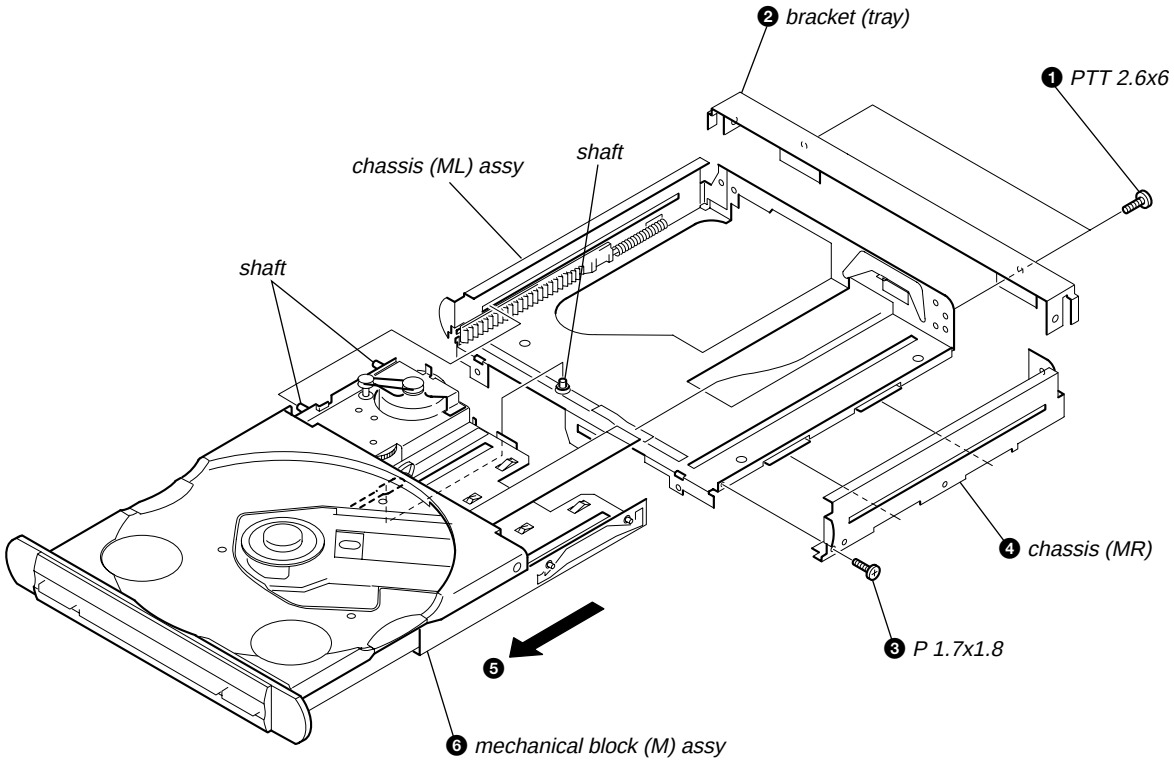
2-5. MAIN BOARD



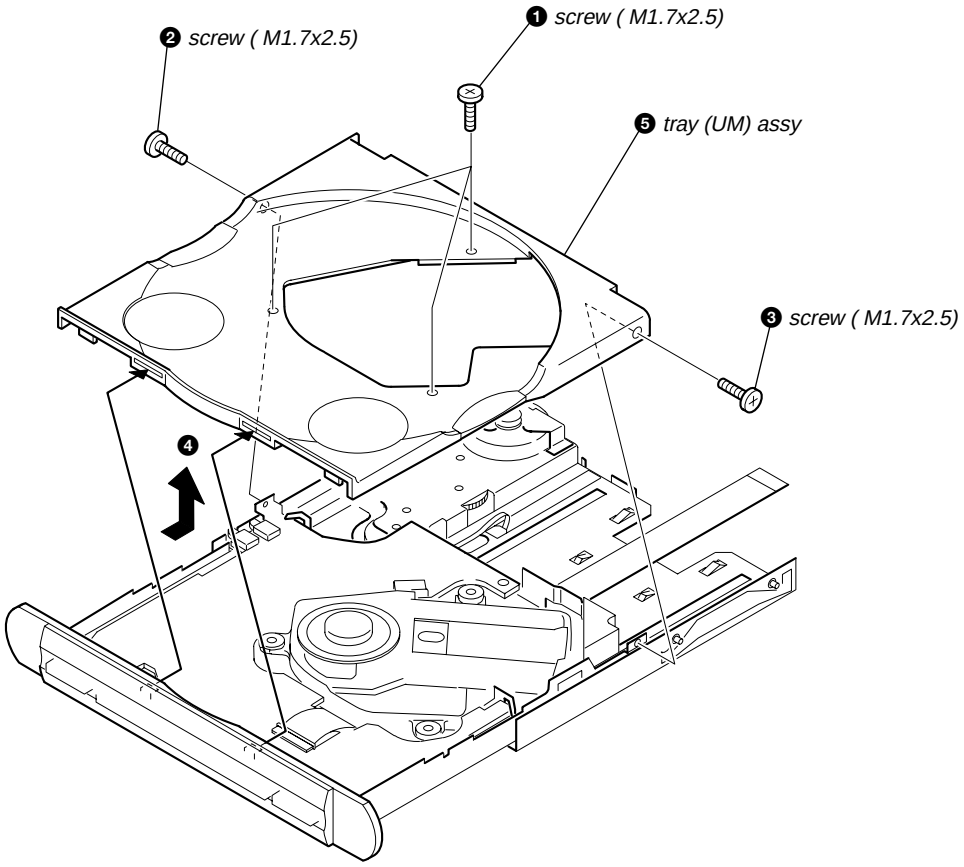
2-6. HEAT SINK



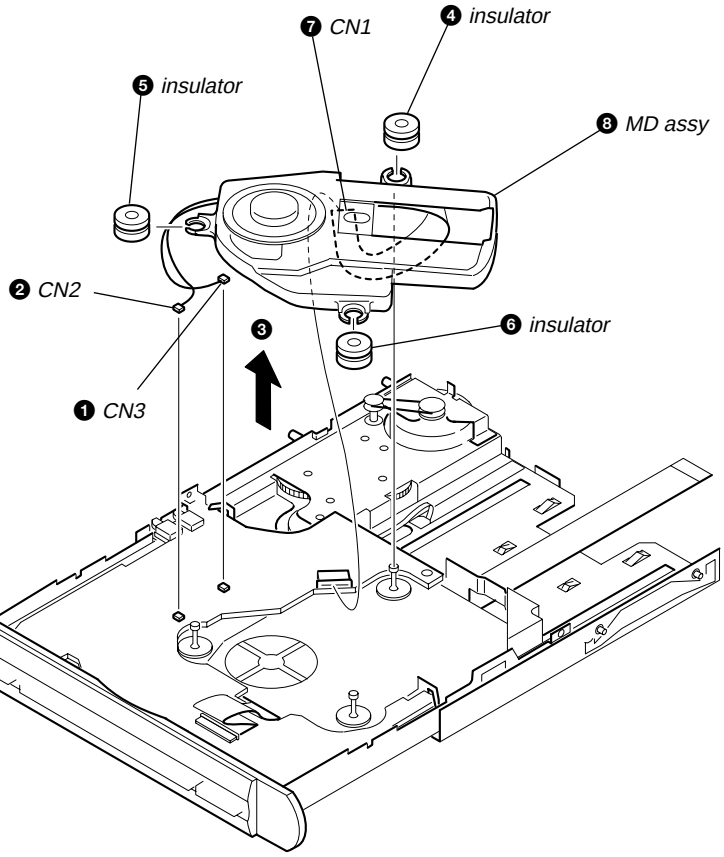
2-7. MECHANISM BLOCK (M) ASSY



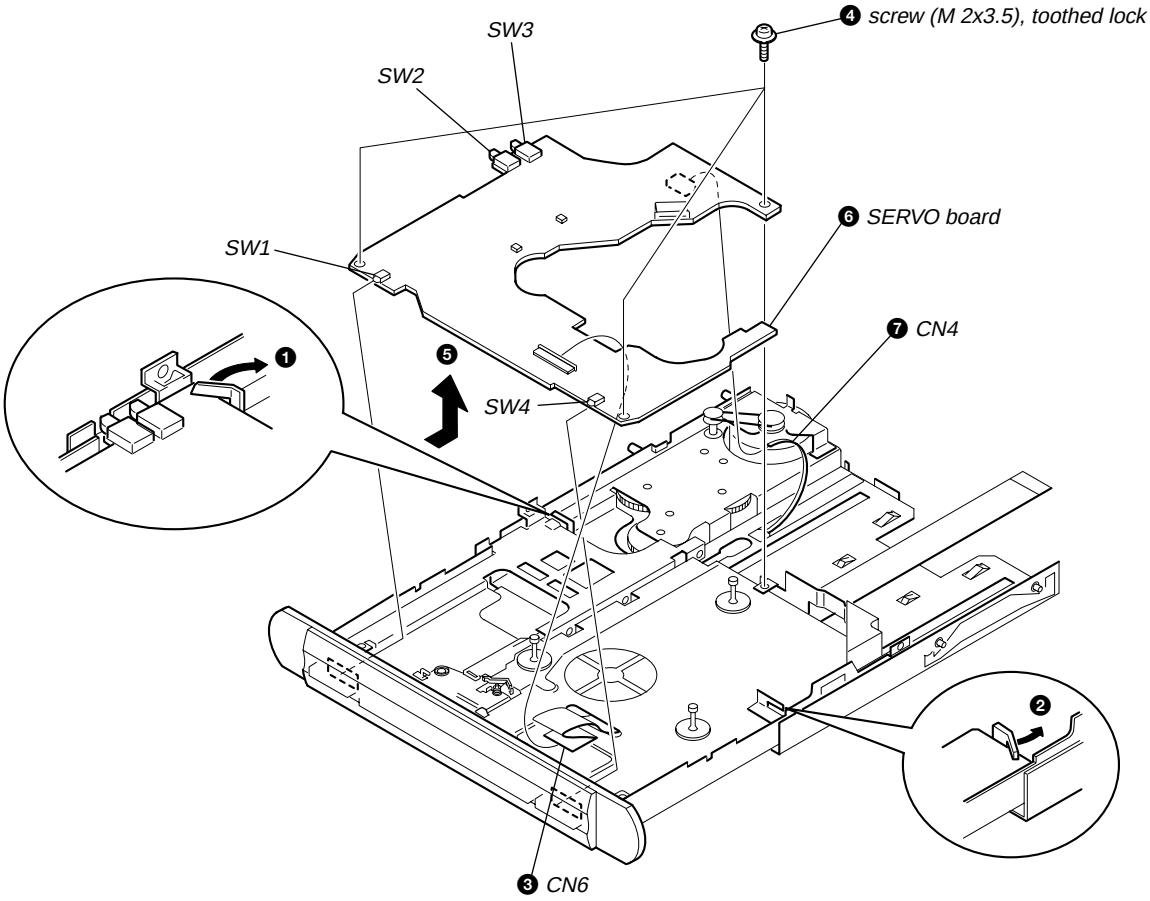
2-8. TRAY (UM) ASSY



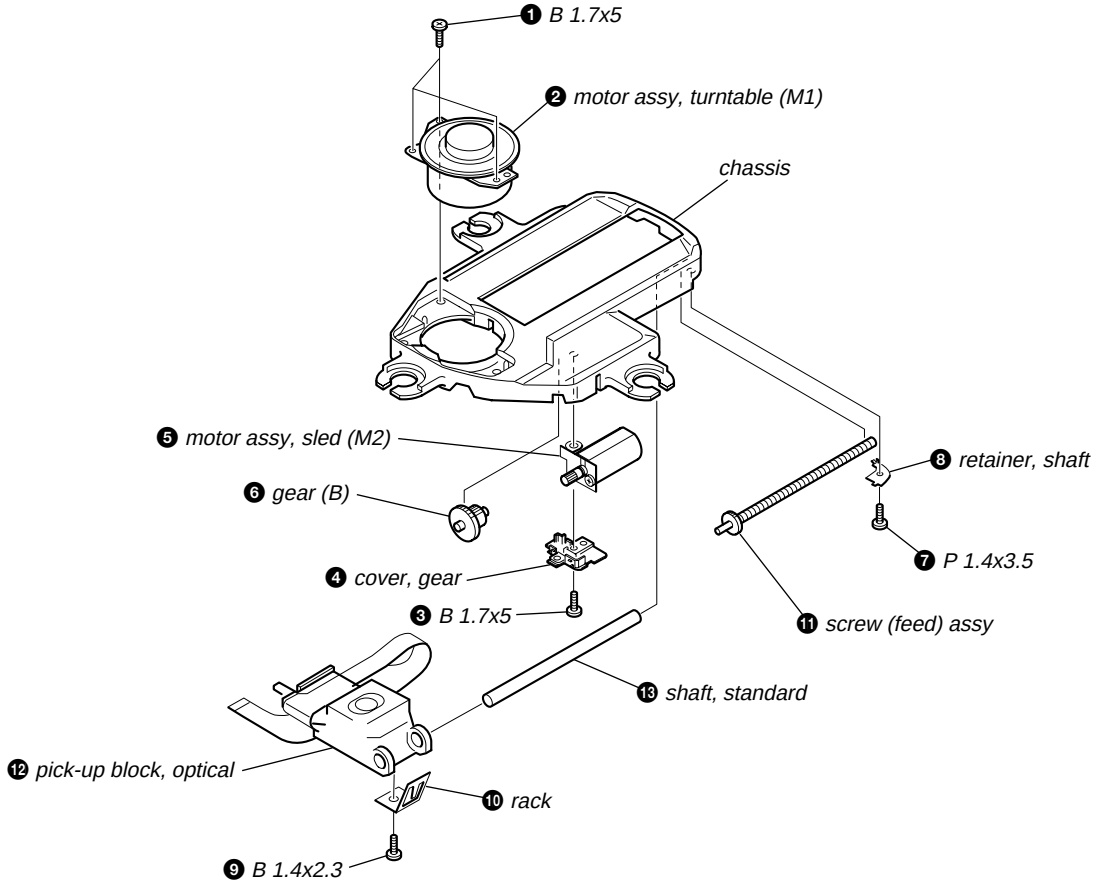
2-9. MD ASSY



2-10. SERVO BOARD



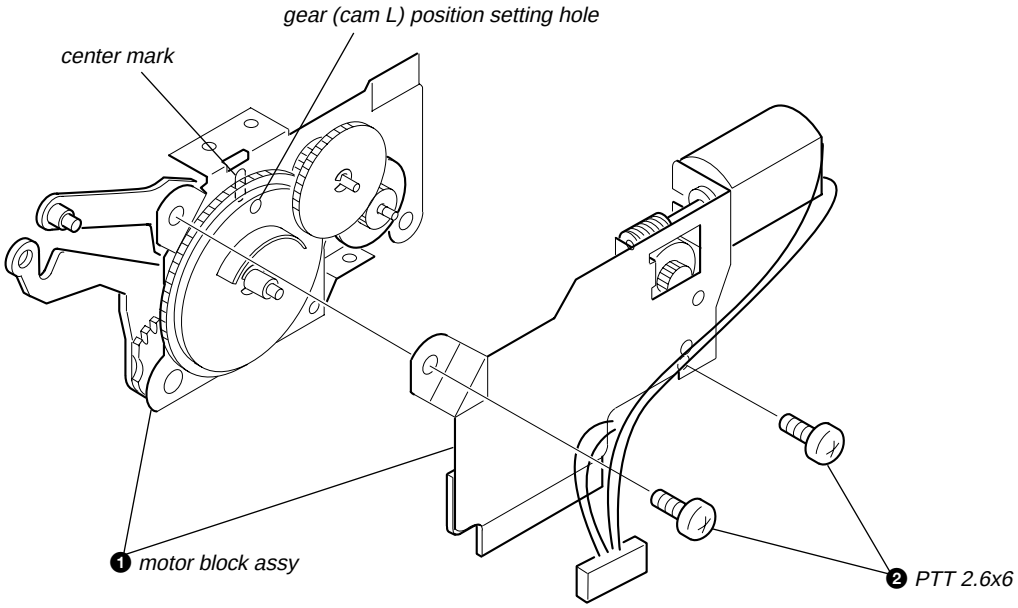
2-11. OPTICAL PICK-UP BLOCK



SECTION 3
PHASE ALIGNMENT

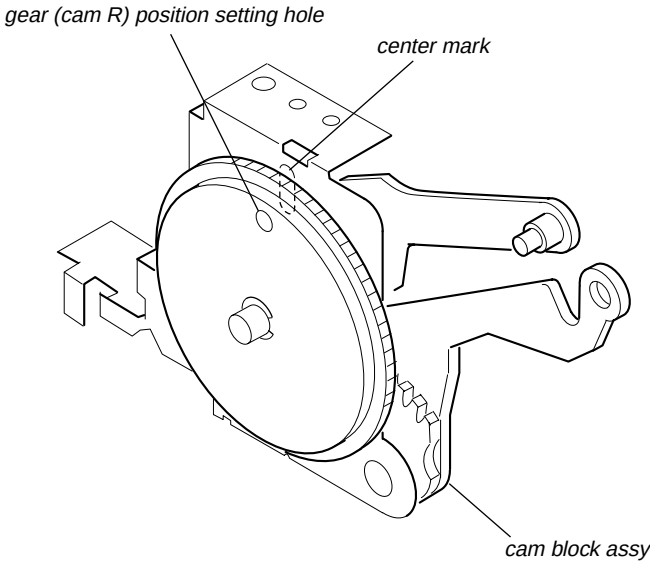
3-1. GEAR (CAM L)

• Align the gear (cam L) position setting hole with the center mark on the bracket before screwing the motor block assy to the mechanism chassis.



3-2. GEAR (CAM R)

① Align the gear (cam R) position setting hole with the center mark on the bracket before screwing the cam block assy to the mechanism chassis.
② Touch the gear (cam R) with fingers in the direction of rotation and make sure that there is no phase difference with the R-side position setting hole.



SECTION 4
DIAGRAMS

4-1. IC PIN DESCRIPTIONS

• IC5 CXD9684R-004 (AUDIO INTERFACE) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	RESET	I	Reset input
2	MIMD	I	CPU interface mode select signal
3	AD0	I	CPU interface chip select signal
4	AD1	I	CPU interface latch pulse signal
5	MIDIO	I/O	CPU interface data input/output
6	MICK	I	CPU interface clock signal
7	AD2/MIACK	I	CPU interface acknowledge signal
8	VDDT	—	Power supply pin (+3.3 V)
9	SDO	O	Data output
10	AD3/BCKO	O	Bit output
11	AD4/LRCKO	O	LR clock output
12	SDI0	I	Data input 0
13	BCKIA	I	Bit clock input A
14	LRCKIA	I	LR clock input A
15	AD5/SDI1	I	Data input 1
16	CE/BCKIB	I	Bit clock input B
17	OE/LRCKIB	I	LR clock input B
18	VDD	—	Power supply pin (+2.5 V)
19	STANDBY	I	Standby mode control signal
20	VSS	—	Ground
21	VSSL	—	Ground for DAC Lch
22	VRAL	—	Reference voltage pin for DAC Lch
23	LO	O	DAC Lch output
24	VDAL	—	Power supply pin (+2.5 V) for DAC Lch
25	VDAR	—	Power supply pin (+2.5 V) for DAC Rch
26	RO	O	DAC Rch output
27	VRAR	—	Reference voltage pin for DAC Rch
28	VSSR	—	Ground for DAC Rch
29	TESTP	I	Test pin
30	CKS	I	VCO select signal
31	AD12/PO0	O	Address output 0
32	AD11/PO1	O	Address output 1
33	AD10/PO2	O	Address output 2
34	AD9/PO3	O	Address output 3
35	VDDT	—	Power supply pin (+3.3 V)
36	AD8/PO4	O	Address output 4
37	AD7/PO5	O	Address output 5
38	AD6/PO6	O	Address output 6
39	PO7	O	Address output 7
40	VSS	—	Ground
41	AD13/FI0	I	Flag input 0
42	AD14/FI1	I	Flag input 1
43	WR/FI2	I	Flag input 2
44	AD16/FI3	I	Flag input 3
45	AD15/IRQ	I/O	External interrupt signal
46	IO0/PI0	I	Data input 0
47	IO1/PI1	I	Data input 1
48	VSS	—	Ground
49	IO2/PI2	I	Data input 2
50	IO3/PI3	I	Data input 3
51	IO4/PI4	I	Data input 4

Pin No.	Pin Name	I/O	Pin Description
52	VDD	—	Power supply pin (+2.5 V)
53	IO5/PI5	I	Data input 5
54	IO6/BOOT	I	Boot control signal
55	IO7/TXO	I	SPDIF signal
56	VSSP	—	Ground
57	PDO	O	PLL phase detect signal
58	VCOI	I	VCO control voltage input
59	VDDP	—	Power supply pin (+2.5 V) for VCO
60	CKI/ACKO	I/O	External clock input/audio clock output
61	VDDX	—	Power supply pin (+2.5 V) for crystal oscillator
62	X1	I	Crystal oscillator (16.934 MHz)
63	X0	O	Crystal oscillator (16.934 MHz)
64	VSSX	—	Ground

• IC11 HD6432238RWN13TEI (CD SYSTEM CONTROL) (SERVO BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	TEST	I	Test mode select signal
2	DEC XRST	O	DEC reset output
3	DEC STBY	O	DEC standby mode control signal
4	XRDE	O	DRAM data read-out enable signal
5	(NCO)	O	Not used. (Open)
6	XWRE	O	DRAM write-in enable signal
7	SCLK	O	SENS read-out serial clock signal
8	SENS	I	SENS signal
9	CD CLK	O	CD servo serial clock signal
10	CD DAT	O	CD servo serial data output
11	CD LAT	O	CD servo latch signal
12	CVCC	—	Power supply pin (+3.3 V)
13	DAC MUTE	O	DAC mute control signal
14	VSS	—	Ground
15	MUTE	O	Audio mute control signal
16	XRST	O	CD servo reset signal
17	XQOK	O	CD servo sub-code Q OK signal
18	EMPH	O	Emphasis control signal
19	GFS	I	GFS signal
20	FOK	I	FOK signal
21	APC2	O	APC control signal 2
22	APC1	O	APC control signal 1
23	SPST	O	Spindle kick signal
24	RW SEL	O	Not used. (Open)
25	RF SW	O	Not used. (Open)
26	SIZE	I	Not used. (Open)
27	D IN	I	Not used. (Open)
28	D OUT	I	Not used. (Open)
29	LIM SW	I	PU inner detect SW signal
30	PSB	O	Mute signal
31	PC TX	O	Bus data output
32	PC RX	I	Bus data input
33	IN SW	I	Not used. (Open)
34	LM LO	O	Not used. (Open)
35	LM EJ	O	Not used. (Open)
36	EJECT OK	I	Front panel open mode signal
37	CLOSE OK	O	Not used. (Open)
38	SCOR	I	Sub-code sync detect signal
39	TRAY LAMP	O	Not used. (Open)
40	GRSCOR	I	DRAM controller sub-code sync detect signal
41	HSTX	O	High speed signal
42	AVSS	—	Ground
43	TE BAL ADJ	O	TE balance adjustment
44	DRAM	O	Not used. (Open)
45	D SW	I	Disc chucking detect signal
46	TRAY CUR	I	Tray current detect signal
47	KEY0	I	Test mode key SW input
48	KEY1	I	Test mode rotary SW input
49	(NCO)	I	Connecting to ground in this set.
50	(NCO)	I	Connecting to ground in this set.
51	TEMP	I	Tempareture detect signal
52	(NCO)	I	Connecting to ground in this set.

Pin No.	Pin Name	I/O	Pin Description
53	AVREF	—	Reference voltage pin (+3.3 V) for A/D converter
54	AVCC	—	Power supply pin (+3.3 V) for A/D converter
55	MD0	—	CPU operation mode setting
56	MD1	—	CPU operation mode setting
57	OSC2	—	Not used. (Open)
58	OSC1	—	Connecting to ground in this set.
59	RSTX	I	CPU reset signal
60	NMI	O	Connecting to VCC (+3.3 V) in this set.
61	STBY	—	Connecting to VCC (+3.3 V) in this set.
62	VCC	—	Power supply pin (+3.3 V)
63	XTAL	—	Crystal oscillator (12.288 MHz)
64	VSS	—	Ground
65	XTXAL	—	Crystal oscillator (12.288 MHz)
66	F WE	—	Flash write enable
67	MD2	—	CPU operation mode setting
68	FL BOOT	I	Flash write-in mode select signal
69	FL W	O	Flash write control signal
70	CD ON	O	CD servo power control signal
71	CDM ON	O	Not used. (Open)
72	DEC INT	I	DEC interrupt signal
73	(NCO)	O	Not used. (Open)
74	LINK OFF	O	Link off signal
75	EJECT KEY	I	Eject key signal
76	UNI SO	O	SONY bus serial data output
77	UNI SI	I	SONY bus serial data input
78	UNI CK	I	SONY bus clock signal
79	(NCO)	O	Not used. (Open)
80	SDA	I/O	I2C interface data input/output
81	SCL	O	I2C interface clock signal
82, 83	(NCO)	O	Not used. (Open)
84	SQSO	I	Sub-code Q data input
85	SQCK	O	Sub-code Q read-out clock signal
86	LED DAT	O	LED data output
87	LED CLK	O	LED clock signal
88	LED LAT	O	LED latch signal
89, 90	(NCO)	O	Not used. (Open)
91	BUS ON	I	Bus ON signal
92	BU CHK	I	Back up voltage detect signal
93	(NCO)	O	Not used. (Open)
94	(NCO)	O	Not used. (Open)
95, 96	(NCO)	O	Not used. (Open)
97	TEXT SEL	I	CD text function select
98	ESP SEL	I	ESP function select
99	CF SEL	I	Custom file function select
100	DOUT SEL	I	Digital-out select

• IC501 MB90574CPMT-G-361-BNDE1 (SYSTEM CONTROL) (MAIN BOARD) (AEP, UK model)
• IC501 MB90574CPMT-G-362-BNDE1 (SYSTEM CONTROL) (MAIN BOARD) (US, Canadian model)

Pin No.	Pin Name	I/O	Pin Description
1 – 4	(NCO)	O	Not used. (Open)
5	ATT	O	System mute control signal
6	$\overline{\text{SYS RST}}$	O	System reset signal
7	(NCO)	O	Not used. (Open)
8	VCC	—	Power supply pin (+5 V)
9	AMP ATT	O	Power amplifier mute signal
10	T.ROM SDA	I/O	Tuner unit EEPROM data input/output
11	T.ROM SCK	O	Tuner unit EEPROM clock output
12	NOSE SW/RX	I	Nose SW detect signal
13	TX	O	Flash CPU write-in data output
14	$\overline{\text{BUS ON}}$	O	BUS ON control signal
15	BEEP	O	Beep signal
16	TEL ATT	I	Telephone mute detect signal
17	UNI SI	I	SONY BUS data input
18	UNI SO	O	SONY BUS data output
19	UNI CLK	O	SONY BUS clock output
20 – 23	(NCO)	O	Not used. (Open)
24	SIRCS	I	Wireless remote data input
25 – 30	(NCO)	O	Not used. (Open)
31	$\overline{\text{E VOL ATT}}$	O	Electronic volume mute signal
32	(NCO)	O	Not used. (Open)
33	VSS	—	Ground
34	C	—	Condenser pin for voltage stabilizer
35	$\overline{\text{CDON IN}}$	I	CD On signal
36	(NCO)	O	Not used. (Open)
37	FSW SFT	O	OSC frequency shift signal for DC/DC conv.
38	DVCC	—	Power supply pin (+5 V)
39	DVSS	—	Ground
40, 41	(NCO)	O	Not used. (Open)
42	AVCC	—	Power supply pin (+5 V)
43	AVRH	—	Power supply pin (+5 V)
44	AVRL	—	Ground
45	AVSS	—	Ground
46	KEY IN0	I	Key input 0
47	TEMP	I	Tempareture detect signal
48	RC IN0	I	Rotary commander input 0
49	FP-I DET	I	Front panel motor current detect signal
50	QUALITY	I	Tuner noise detction signal (AEP, UK model)
51	TR-I DET	I	Tray motor current detect signal
52	MPTH	I	Tuner multi-pass detect signal (AEP, UK model)
53	VSM	I	S-meter voltage detect signal
54	VCC	—	Power supply pin (+5 V)
55	AMP ON	O	AMP ON control signal
56	NS MASK	O	Tuner noise masking control signal
57	DDC ON	O	DC/DC converter power control signal
58	OPEN SENS	I	Tray open detection signal
59	CLOSE SENS	I	Traay close detect signal
60	LED ON	O	Tray illumination ON signal
61	T CLOSE	O	Tray loading motor output
62	T OPEN	O	Tray loading motor output
63	VSS	—	Ground

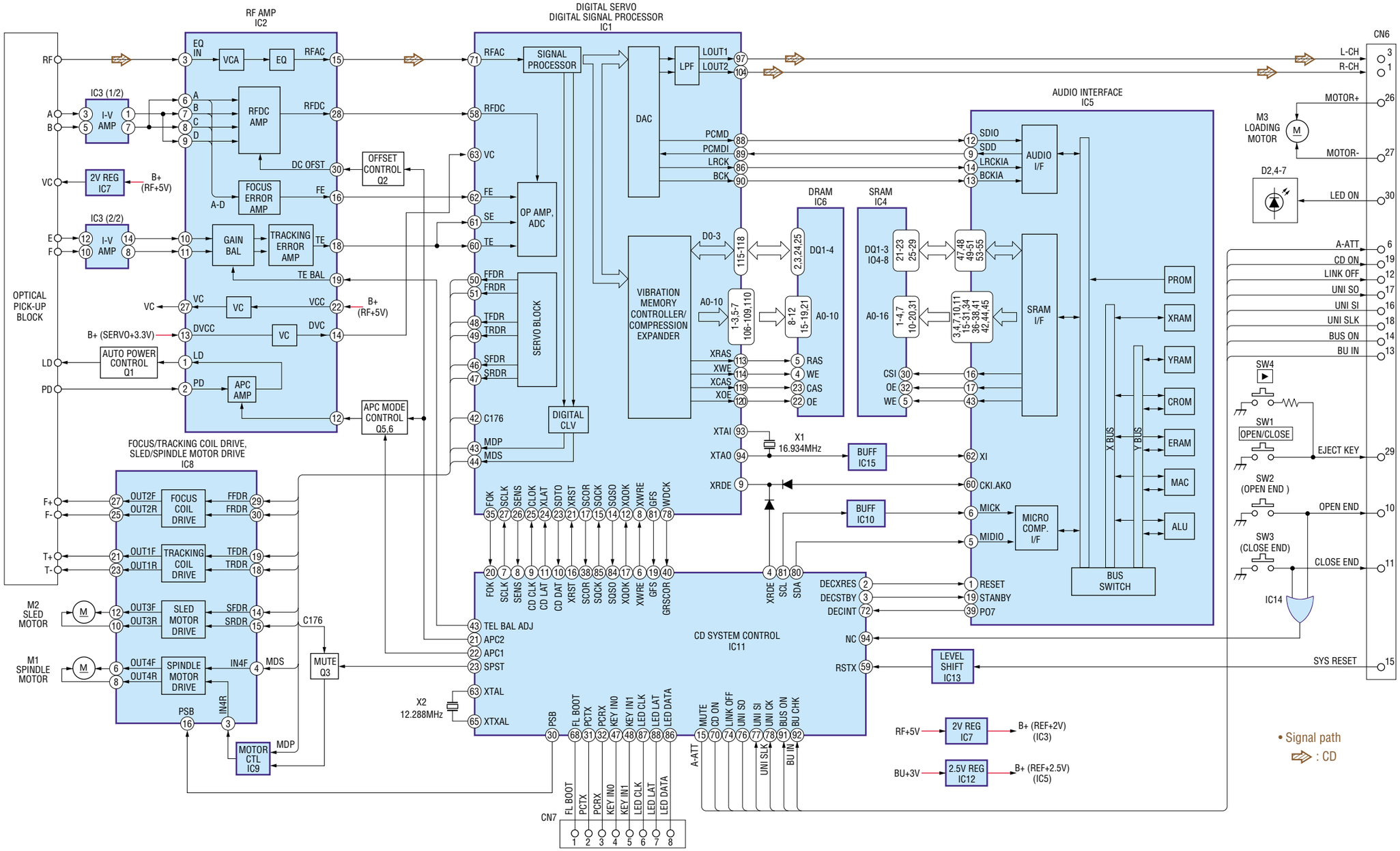
Pin No.	Pin Name	I/O	Pin Description
64	(NCO)	O	Not used. (Open)
65	FSW IN	I	Oscillation frequency count input
66 – 68	(NCO)	O	Not used. (Open)
69	$\overline{\text{FLASH W}}$	I	Flash write-in mode detect signal
70	I2C SIO	O	I2C serial data output
71	I2C CKO	O	I2C serial clock output
72	KEYACK	I	Key acknowledge signal
73	X1A	—	Crystal oscillator (32.768 kHz)
74	X0A	—	Crystal oscillator (32.768 kHz)
75	DAVN	I	RDS data acquisition detect signal (AEP, UK model)
76	(NCO)	O	Not used. (Open)
77	BU IN	I	Back-up power detect signal
78	(NCO)	O	Not used. (Open)
79	RC IN1	I	Rotary commander input 1
80	$\overline{\text{AD ON}}$	O	A/D converter power control signal
81	$\overline{\text{ACC IN}}$	I	Accessory key ON signal
82	FLASH P ON	O	Flash power ON control signal
83	POW ON	O	Audio circuit power ON control signal
84	$\overline{\text{TEST IN}}$	I	Test mode initial setting detect signal
85	RAM BU	I	RAM reset detect signal
86	HSTX	I	Hardware standby input
87	MD2	I	Connecting to ground in this set.
88	MD1	I	Connecting to VCC (+5 V) in this set.
89	MD0	I	Connecting to VCC (+5 V) in this set.
90	RSTX	I	Reset input
91	VSS	—	Ground
92	X0	—	Crystal oscillator (3.68 MHz)
93	X1	—	Crystal oscillator (3.68 MHz)
94	VCC	—	Power supply pin (+5 V)
95	$\overline{\text{ILL IN}}$	I	Illumination dimmer control signal
96	$\overline{\text{MID SW}}$	O	Not used. (Open)
97	FP OPEN	O	OPEN/CLOSE motor control signal
98	FP CLOSE	O	OPEN/CLOSE motor control signal
99	$\overline{\text{CLOSE SW}}$	I	Close SW detection signal
100	$\overline{\text{OPEN SW}}$	I	Open SW detection signal
101	MOTOR ON	O	Motor power supply ON signal
102	(NCO)	O	Not used. (Open)
103	(NCO)	O	Not used.
104	DEST SEL1	I	Destination selector signal 1
105	DEST SEL2	I	Destination selector signal 2
106	$\overline{\text{BOOT}}$	O	Display CPU write-in control signal
107	RE RA	I	Rotary encoder input (Right/AMS)
108	RE RB	I	Rotary encoder input (Right/AMS)
109	RE LA	I	Rotary encoder input (Left/VOL)
110	RE LB	I	Rotary encoder input (Left/VOL)
111 – 113	(NCO)	O	Not used. (Open)
114	TUN ON	O	Tuner ON signal
115 – 118	(NCO)	O	Not used. (Open)
119	VSS	—	Ground
120	(NCO)	O	Not used. (Open)

• IC702 HD6432398-A02 (DISPLAY CONTROL) (MAIN BOARD)

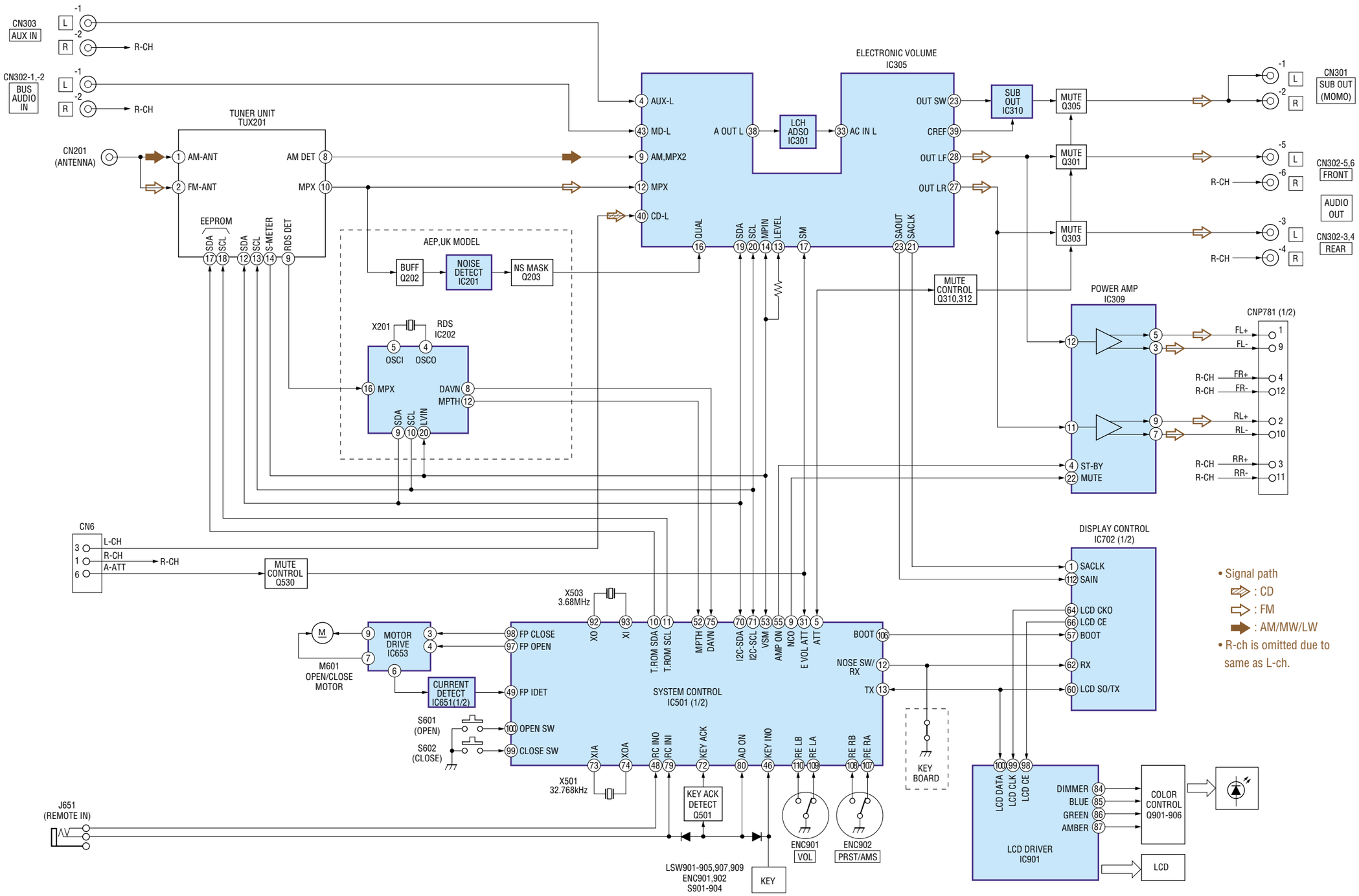
Pin No.	Pin Name	I/O	Pin Description
1	SA CLK	O	Spectrum analyzer clock output
2	(NCO)	O	Not used. (Open)
3	VSS	—	Ground
4	(NCO)	—	Not used. (Open)
5	VCC	—	Power supply pin (+5 V)
6 – 9	(NCO)	O	Not used. (Open)
10	VSS	—	Ground
11 – 18	(NCO)	O	Not used. (Open)
19	VSS	—	Ground
20 – 27	(NCO)	O	Not used. (Open)
28	VSS	—	Ground
29 – 32	(NCO)	O	Not used. (Open)
33	SPE LAT	I	Spectrum analyzer LAT signal
34	BU IN	I	Back up voltage detect signal
35, 36	VSS	—	Ground
37	(NCO)	O	Not used. (Open)
38	BUS ON	I	BUS ON signal
39	VCC	—	Power supply pin (+5 V)
40 – 43	(NCO)	O	Not used. (Open)
44	VSS	—	Ground
45 – 48	(NCO)	O	Not used. (Open)
49	SPE	I	Spectrum analyzer enable signal
50	LINK OFF	O	LINK OFF signal
51	(NCO)	O	Not used. (Open)
52	ILL ON	O	Illumination control signal
53	VSS	—	Ground
54 – 56	(NCO)	O	Not used. (Open)
57	$\overline{\text{BOOT}}$	I	Display CPU write-in control signal
58	VCC	—	Power supply pin (+5 V)
59	(NCO)	O	Not used. (Open)
60	LCD SO/TX	O	LCD data output/UART signal output
61	(NCO)	O	Not used. (Open)
62	RX	I	UART signal input
63	$\overline{\text{L RST}}$	O	Reset signal
64	LCD CKO	O	LCD clock signal
65	VSS	—	Ground
66	LCD CEO	O	LCD driver chip enable
67, 68	VSS	—	Ground
69 – 78	(NCO)	O	Not used. (Open)
79	FL W	O	Not used. (Open)
80	VCL	I	Connecting to ground through a capacitor.
81	$\overline{\text{SYS RES}}$	I	Reset signal
82	NMI	I	Non maskable interrupt signal
83	$\overline{\text{STBY}}$	I	Stanby mode signal
84	VCC	—	Power supply pin (+5 V)
85	XTAL	—	Crystal oscillator (18.432 MHz)
86	EXTAL	—	Crystal oscillator (18.432 MHz)
87	VSS	—	Ground
88	(NCO)	O	Not used. (Open)
89	VCC	—	Power supply pin (+5 V)
90 – 96	(NCO)	O	Not used. (Open)
97	UNI SO	O	Bus data output

Pin No.	Pin Name	I/O	Pin Description
98	UNI SI	I	Bus data input
99	VSS	—	Ground
100	VSS	—	Ground
101	UNI CKI	I	Bus clock signal input
102	(NCO)	O	Not used. (Open)
103	AVCC	—	Power supply pin (+5 V)
104	VREF	—	Reference voltage (+5 V)
105 – 111	NIL	I	Connecting to ground in this set.
112	SA IN	I	SA data input
113	AVSS	—	Ground
114	VSS	—	Ground
115 – 122	(NCO)	O	Not used. (Open)
123	MD0	—	Mode pin
124	MD1	—	Mode pin
125	MD2	—	Mode pin
126 – 128	(NCO)	O	Not used. (Open)

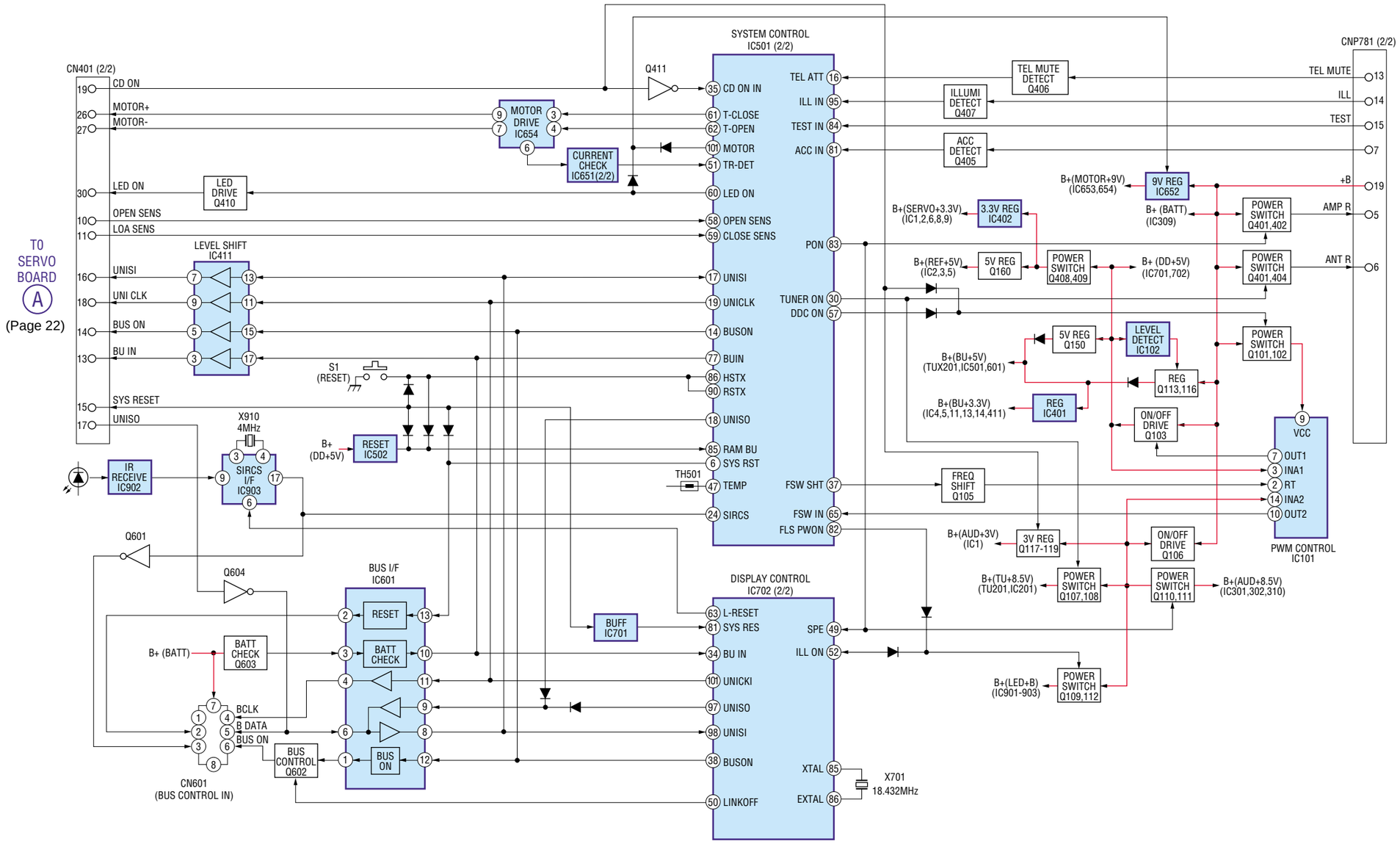
4-2. BLOCK DIAGRAM — CD SECTION —



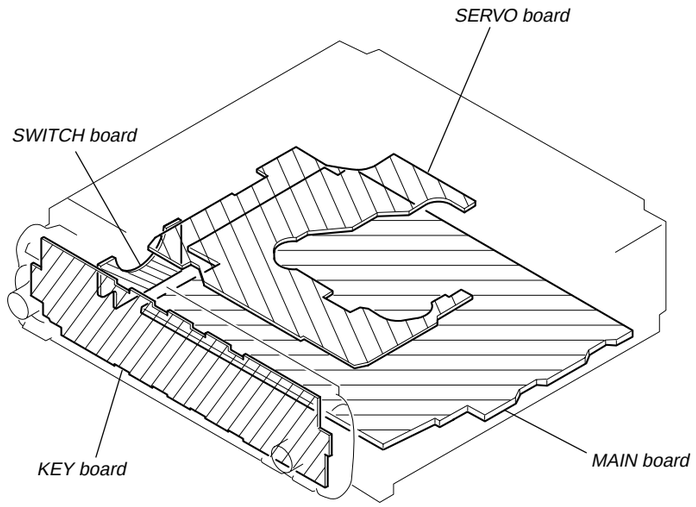
4-3. BLOCK DIAGRAM — AUDIO, DISPLAY SECTION —



4-4. BLOCK DIAGRAM — BUS CONTROL, POWER SECTION —



4-5. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

for schematic diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM/MW/LW
  - ⇛ : CD

for printed wiring boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

• Waveforms

— Servo Board —

(MODE: CD PLAY)

① 0.7Vp-p
IC2 (15) (RFAC)

② 0V, Approx. 200mVp-p
IC2 (16) (FE)

③ 0V, Approx. 600mVp-p
IC2 (18) (TE)

④ 3.3Vp-p, 7.6µsec
IC1 (43) (MDP)

⑤ 3.5Vp-p, 22.7µsec
IC1 (86) (LRCK)

⑥ 3.8Vp-p, 474msec
IC1 (90) (BCK)

⑦ 3Vp-p, 16.9344MHz
IC1 (94) (XTAO)

⑧ 2.2Vp-p, 12.288MHz
IC11 (65) (XTXAL)

— Main Board —

① 2.2Vp-p, 32.768kHz
IC501 (74) (XOA)

② 1.8Vp-p, 3.68MHz
IC501 (92) (XO)

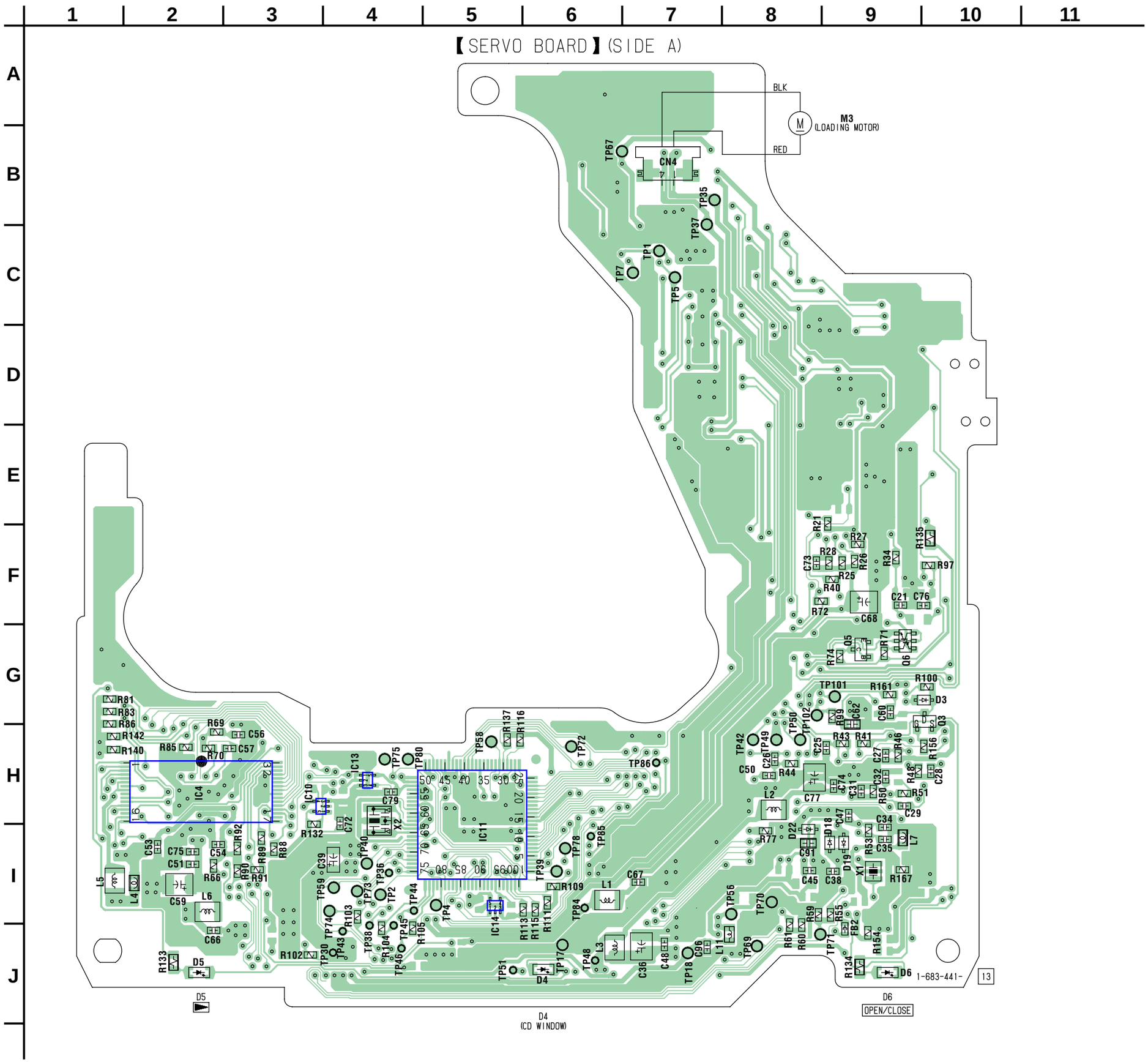
③ 2.3Vp-p, 18.432MHz
IC702 (86) (EXTAL)

④ 2.8Vp-p, 4.332MHz
IC202 (4) (OSCO)

— Key Board —

① 2.2Vp-p, 4MHz
IC903 (4) (XOUT)

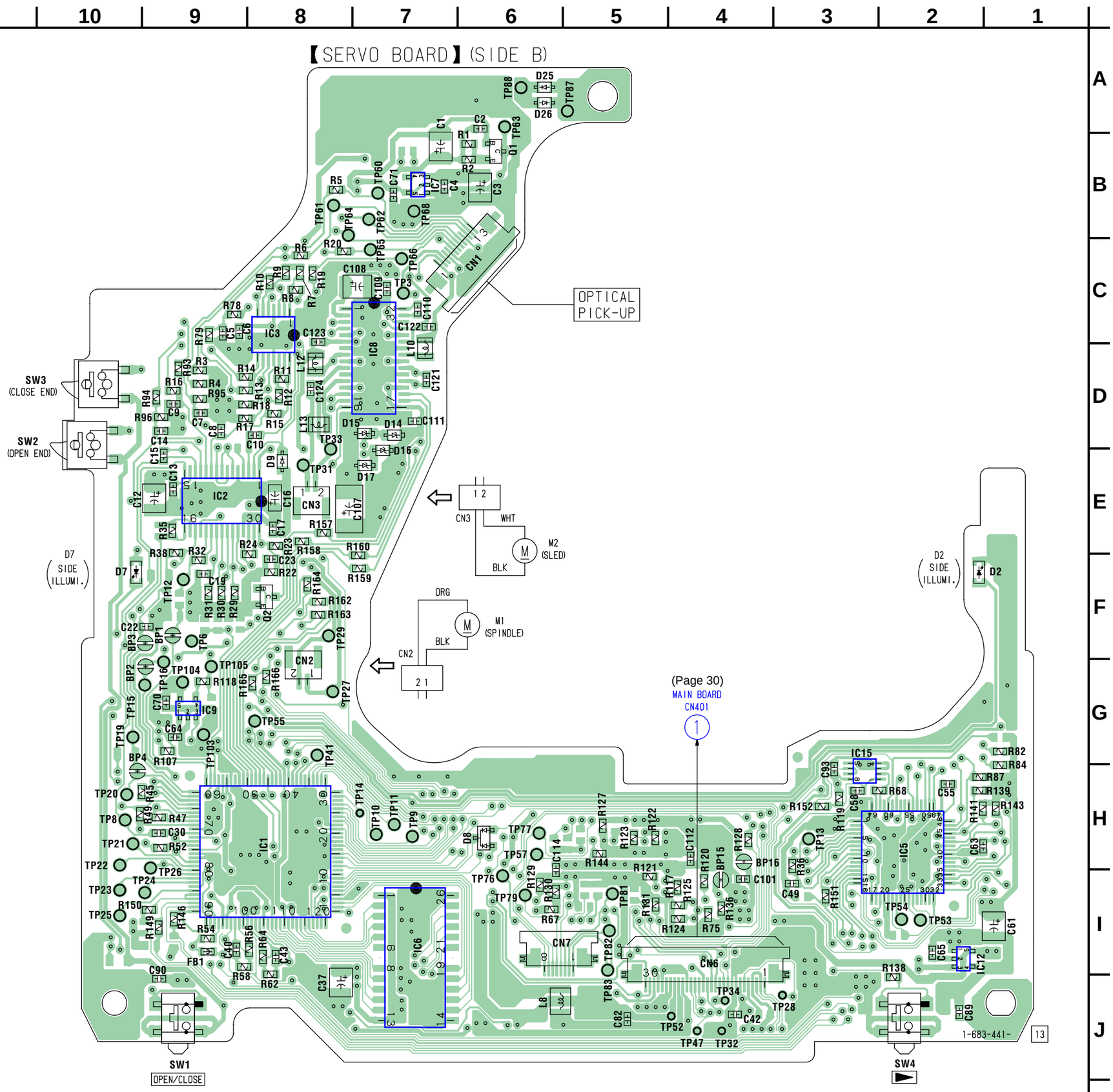
4-6. PRINTED WIRING BOARD — CD MECHANISM SECTION — • Refer to page 25 for Circuit Boards Location.



- **Semiconductor Location**

Ref. No.	Location
D3	G-10
D4	J-6
D5	J-2
D6	J-9
D18	I-9
D19	I-9
D22	I-8
IC4	H-2
IC10	H-3
IC11	I-5
IC13	H-4
IC14	I-5
Q3	G-10
Q5	G-9
Q6	G-9

【SERVO BOARD】(SIDE B)

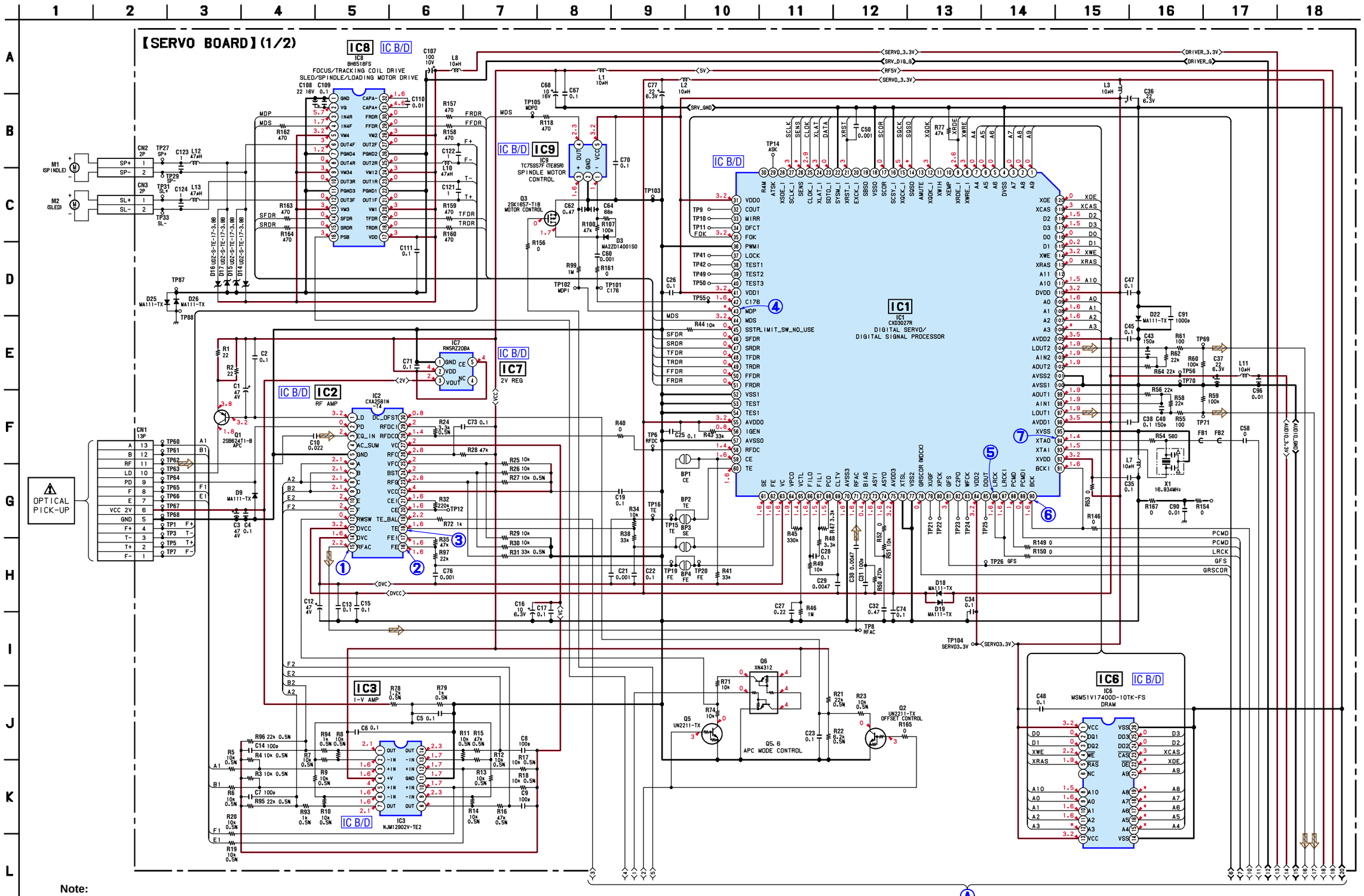


- **Semiconductor Location**

Ref. No.	Location
D2	F-1
D7	F-10
D8	H-6
D9	E-8
D14	D-7
D15	D-7
D16	D-7
D17	E-7
D25	A-6
D26	A-6
IC1	H-8
IC2	E-9
IC3	C-8
IC5	H-2
IC6	I-7
IC7	B-7
IC8	D-7
IC9	G-9
IC12	I-2
IC15	G-3
Q1	B-6
Q2	F-8

4-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) —

• Refer to page 25 for Waveforms.
• Refer to page 37 for IC Block Diagrams.



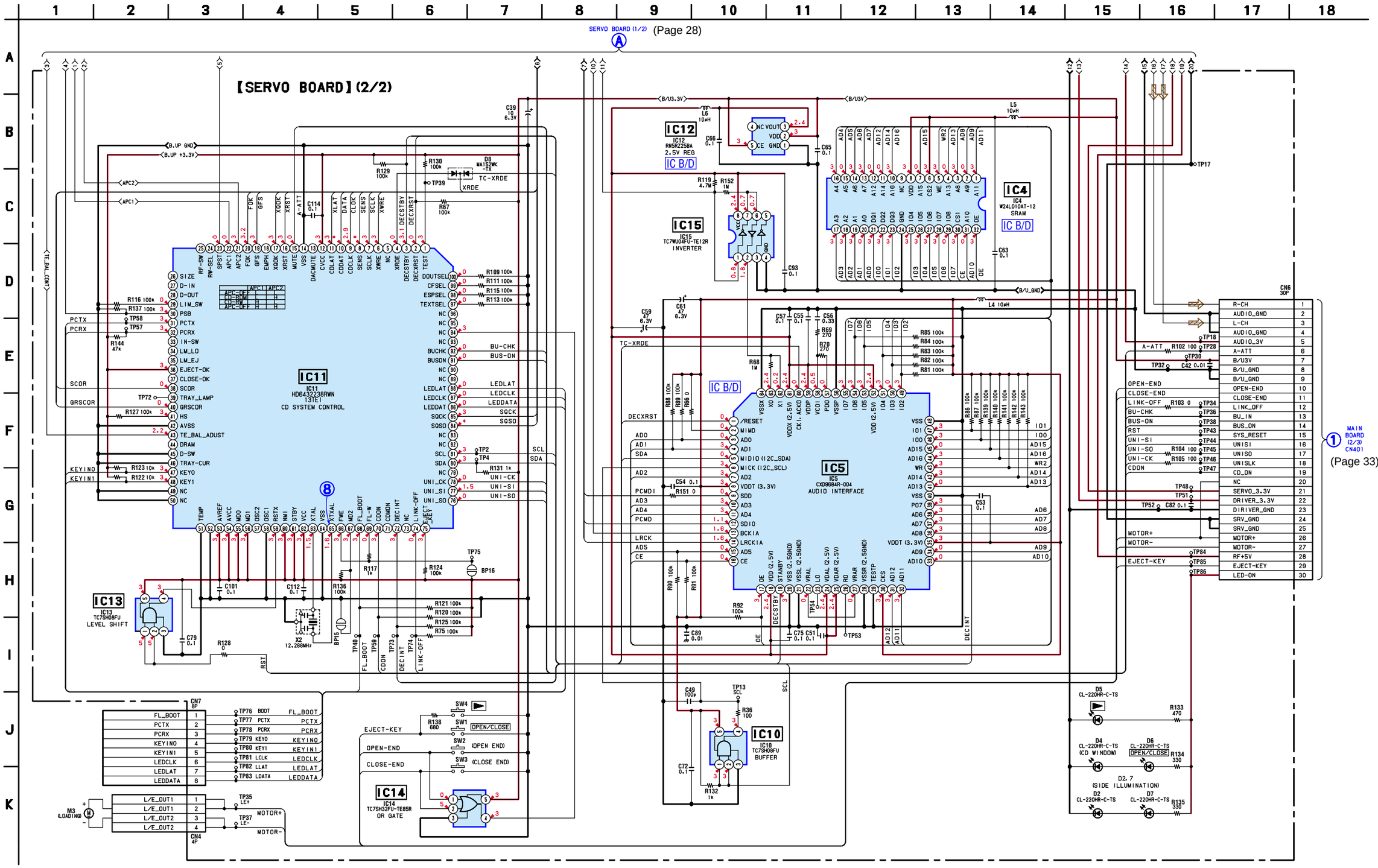
Note:

- Voltage is dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ＊ : Impossible to measure

• Refer to page 25 for Waveform.

4-8. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) —

• Refer to page 38 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  * : Impossible to measure

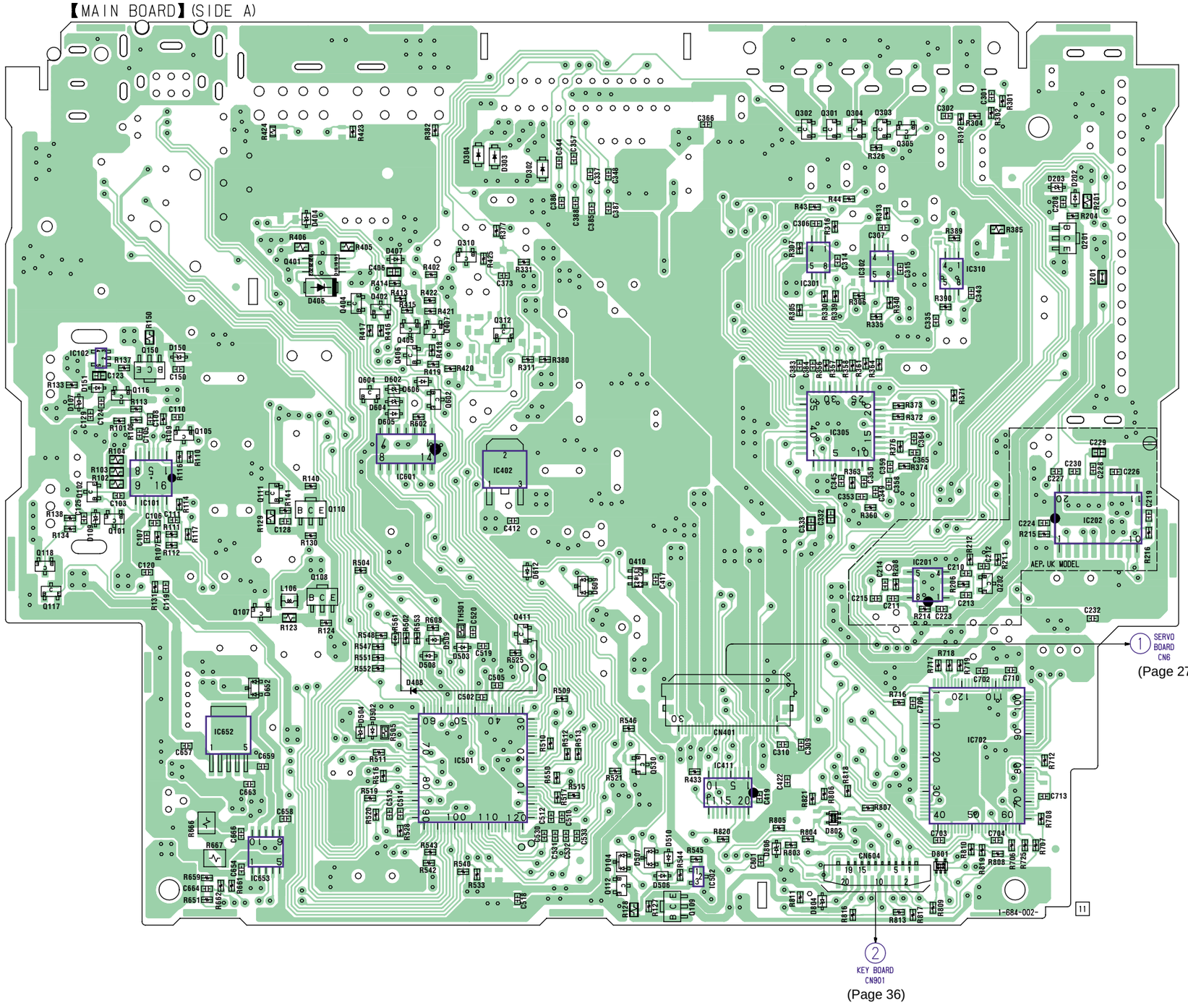
4-9. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 25 for Circuit Boards Location.

• **Semiconductor Location**

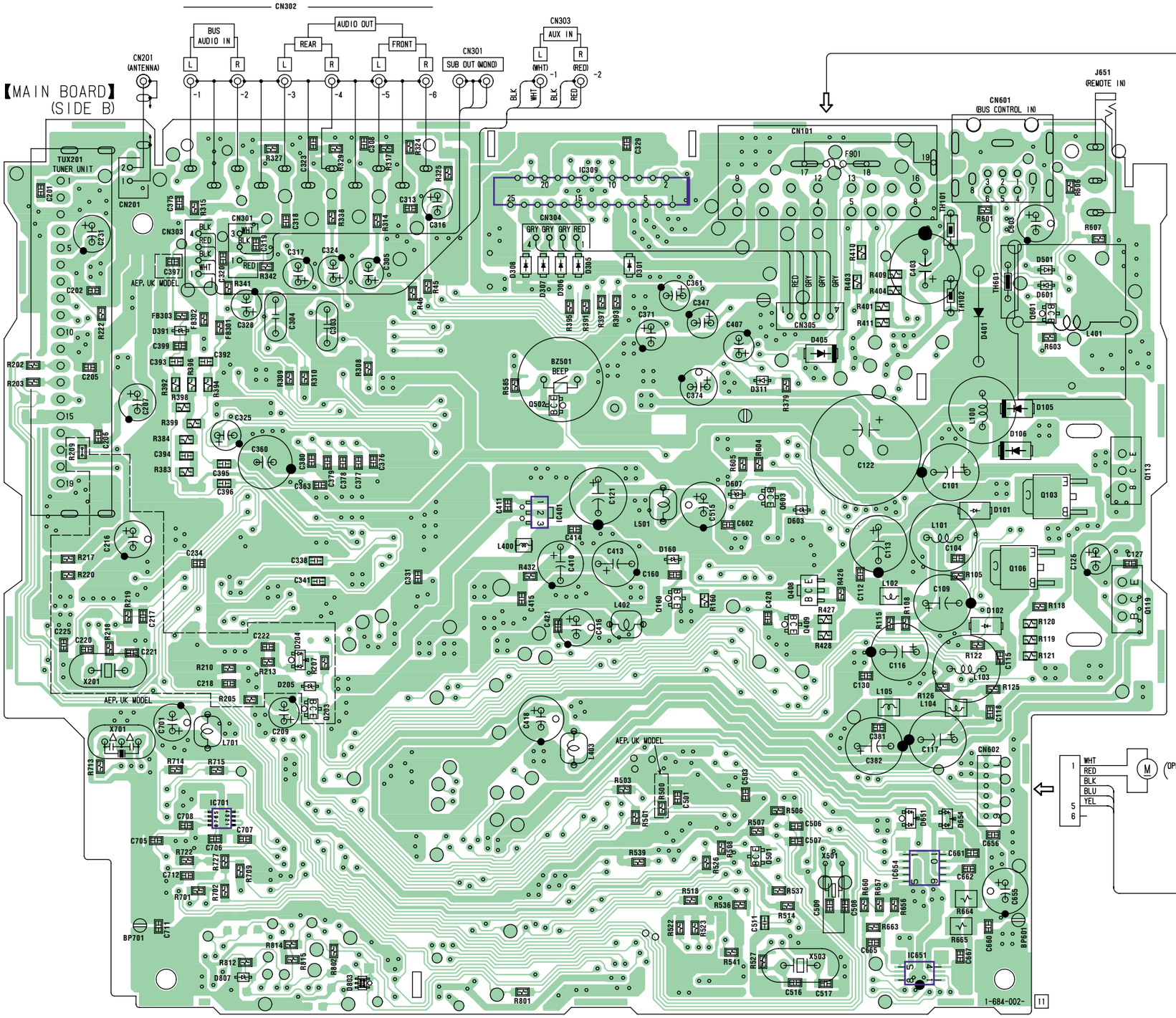
Ref. No.	Location	Ref. No.	Location
(D101)	E-9	IC305	E-4
(D102)	F-9	(IC309)	B-6
D104	I-6	IC310	D-3
(D105)	D-10	(IC401)	E-5
(D106)	E-9	IC402	F-6
D107	E-10	IC411	H-5
D109	F-10	IC501	H-7
D150	E-9	IC502	I-5
D151	E-10	IC601	F-7
(D160)	F-6	(IC651)	I-9
D202	C-2	IC652	H-9
D203	C-2	IC653	I-9
(D204)	F-3	(IC654)	H-8
(D205)	G-3	(IC701)	H-3
(D301)	C-6	IC702	H-2
D302	C-6		
D303	C-7	Q101	F-10
D304	C-7	Q102	F-10
(D305)	C-6	(Q103)	E-10
(D306)	C-6	Q105	E-9
(D307)	C-5	(Q106)	F-9
(D308)	C-5	Q107	G-9
(D311)	D-7	Q108	G-8
(D391)	D-2	Q109	I-5
(D401)	D-9	Q110	F-8
D404	C-8	Q111	F-8
(D405)	D-8	Q112	I-6
D406	D-8	(Q113)	E-10
D407	D-7	Q116	E-10
D408	G-7	Q117	G-10
(D501)	C-10	Q118	F-10
D502	H-8	(Q119)	F-10
D503	G-7	Q150	E-9
D504	H-8	(Q160)	F-6
D506	I-5	Q201	D-2
D507	I-5	Q202	G-2
D508	G-7	(Q203)	G-3
D509	G-7	Q301	C-4
D510	I-5	Q302	C-4
(D601)	C-10	Q303	C-3
D602	E-7	Q304	C-3
(D603)	E-8	Q305	C-3
D604	E-8	Q310	D-7
D605	E-7	Q312	D-6
D606	E-7	Q401	D-8
(D607)	E-7	Q402	D-8
D609	G-6	Q404	D-8
D612	F-6	Q405	D-7
(D651)	H-9	Q406	E-7
D652	G-9	Q407	D-7
(D654)	H-9	(Q408)	F-8
D801	I-3	(Q409)	F-8
D802	I-4	Q410	F-5
(D803)	I-4	Q411	G-6
D804	I-4	(Q501)	H-7
D806	I-4	(Q502)	D-5
(D807)	I-3	Q530	H-5
		(Q601)	C-10
IC101	F-9	Q602	E-7
IC102	E-10	(Q603)	E-7
IC201	F-3	Q604	E-8
IC202	F-1		
IC301	D-4	R561	G-7
IC302	D-3		

( ): SIDE B

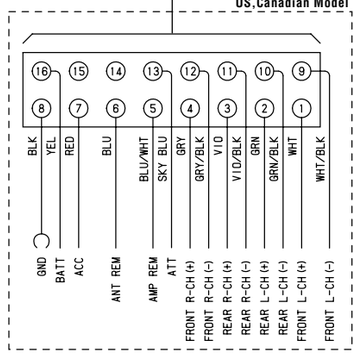
【MAIN BOARD】(SIDE A)



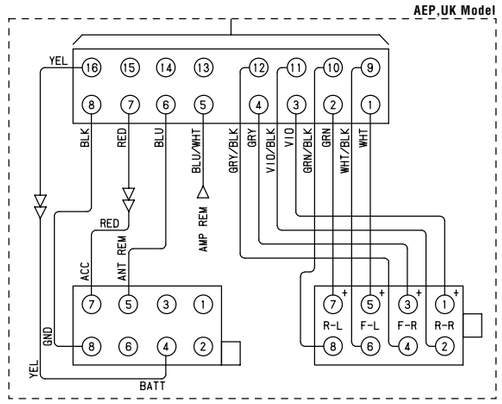
【MAIN BOARD】
(SIDE B)

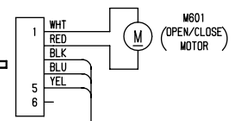


US,Canadian Model

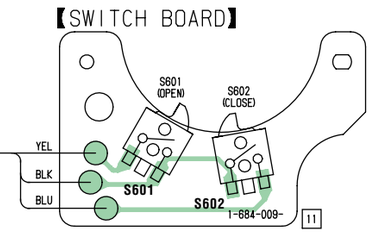


AEP,UK Model



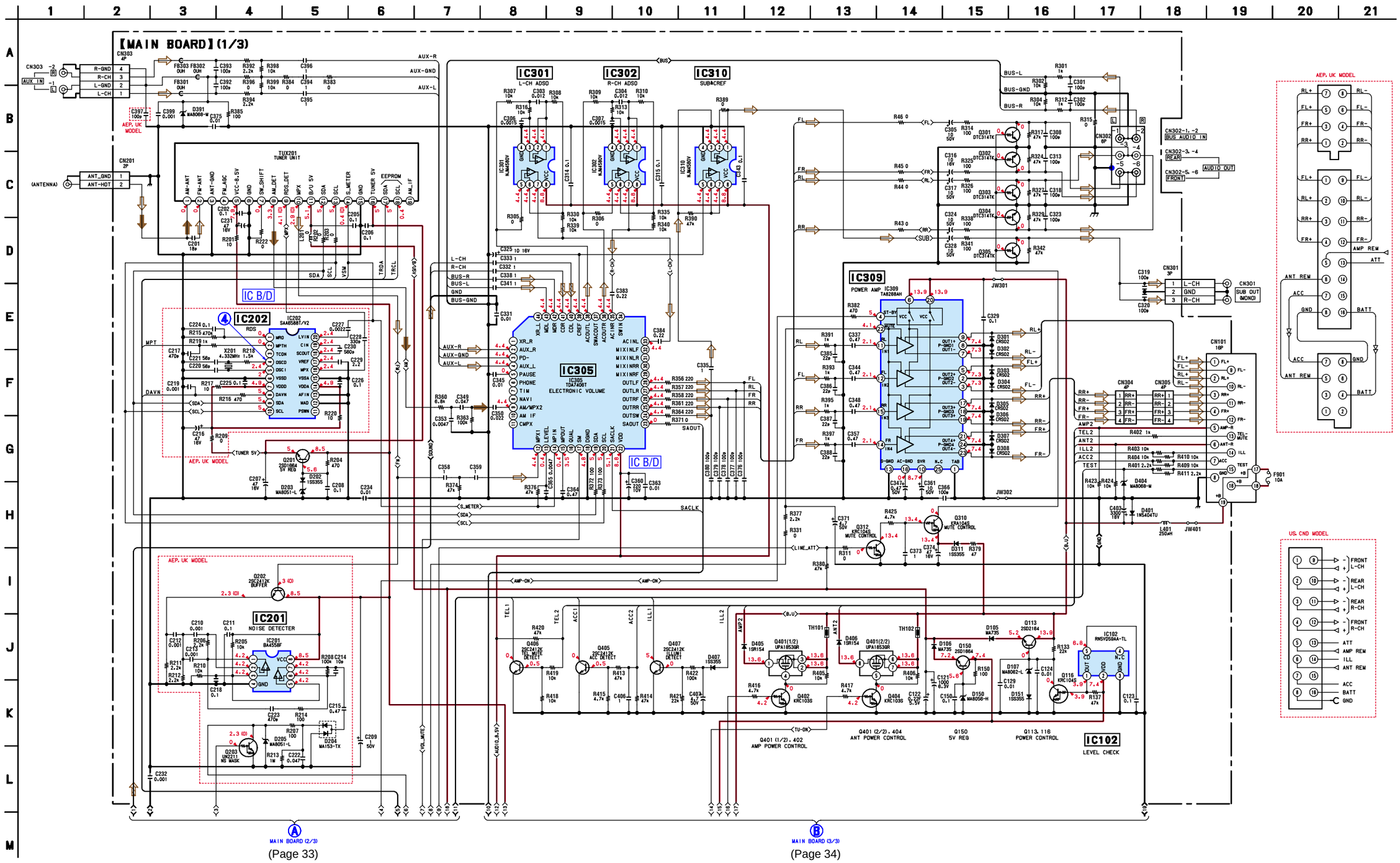


【SWITCH BOARD】



4-10. SCHEMATIC DIAGRAM — MAIN SECTION (1/3) —

• Refer to page 25 for Waveform.
• Refer to page 41 for IC Block Diagrams.



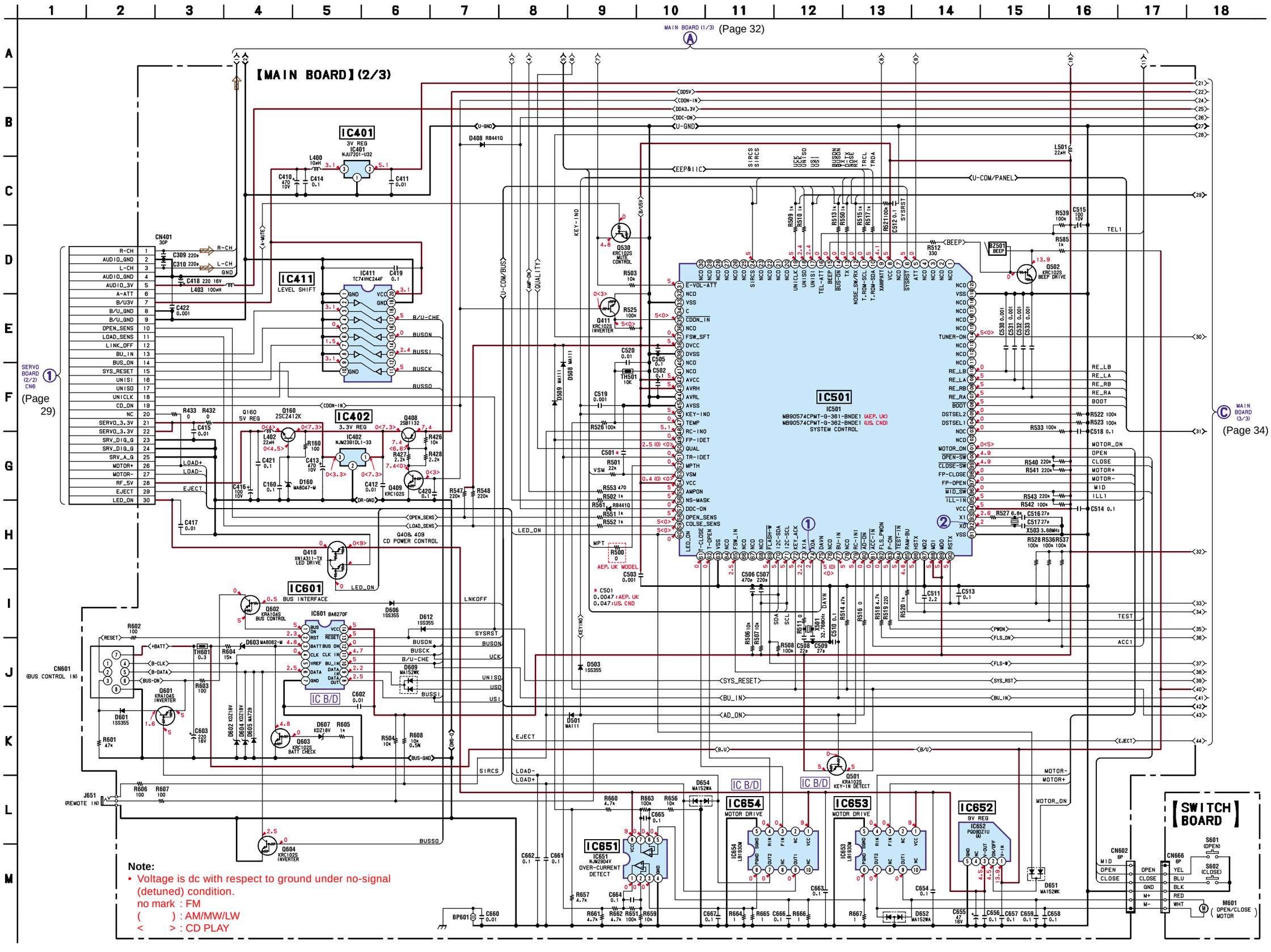
(Page 33) (Page 34)

Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM
  ( ) : AM/MW/LW

• Refer to page 25 for Waveforms.
• Refer to page 43 for IC Block Diagrams.

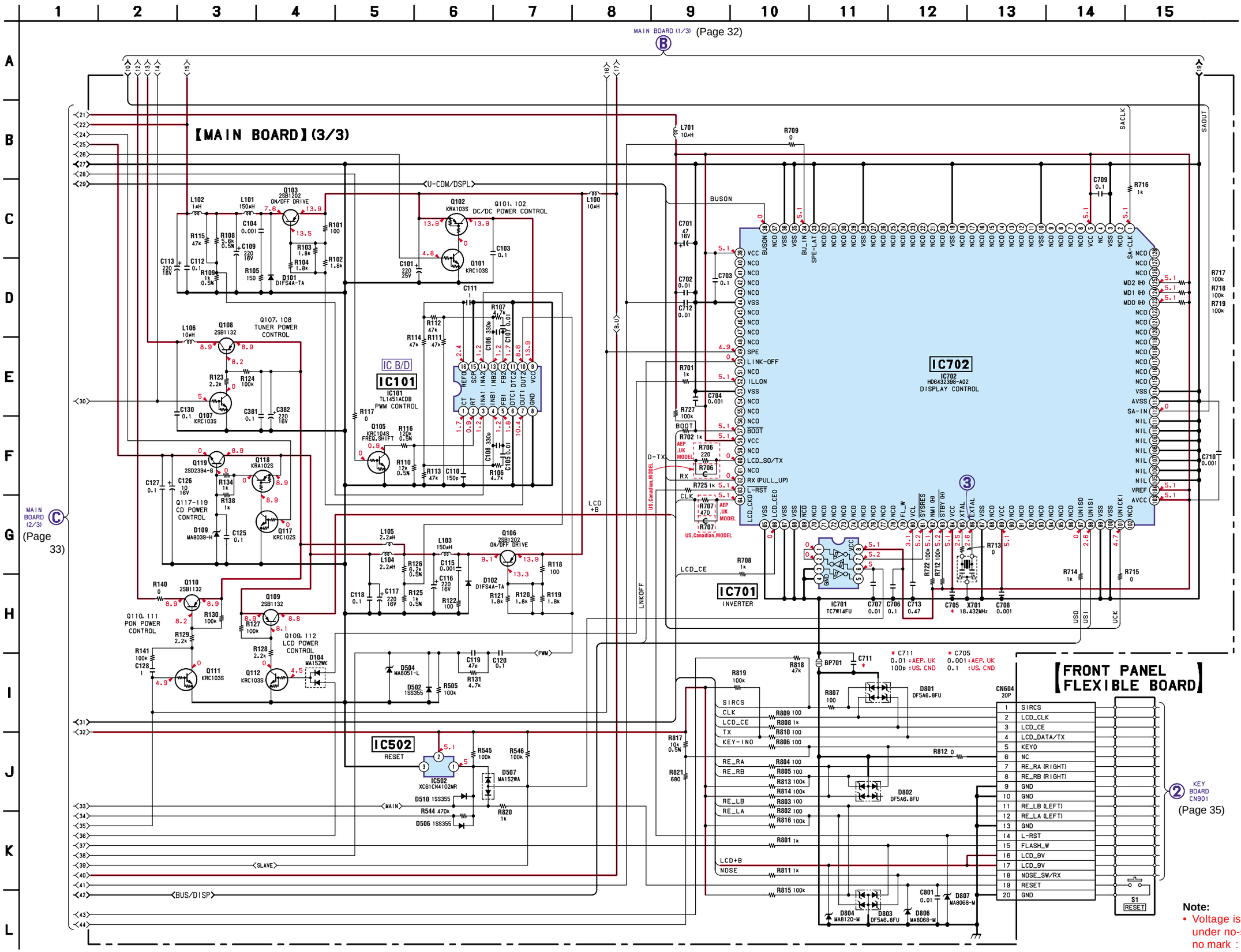
4-11. SCHEMATIC DIAGRAM — MAIN SECTION (2/3) —



• Refer to page 25 for Waveform.

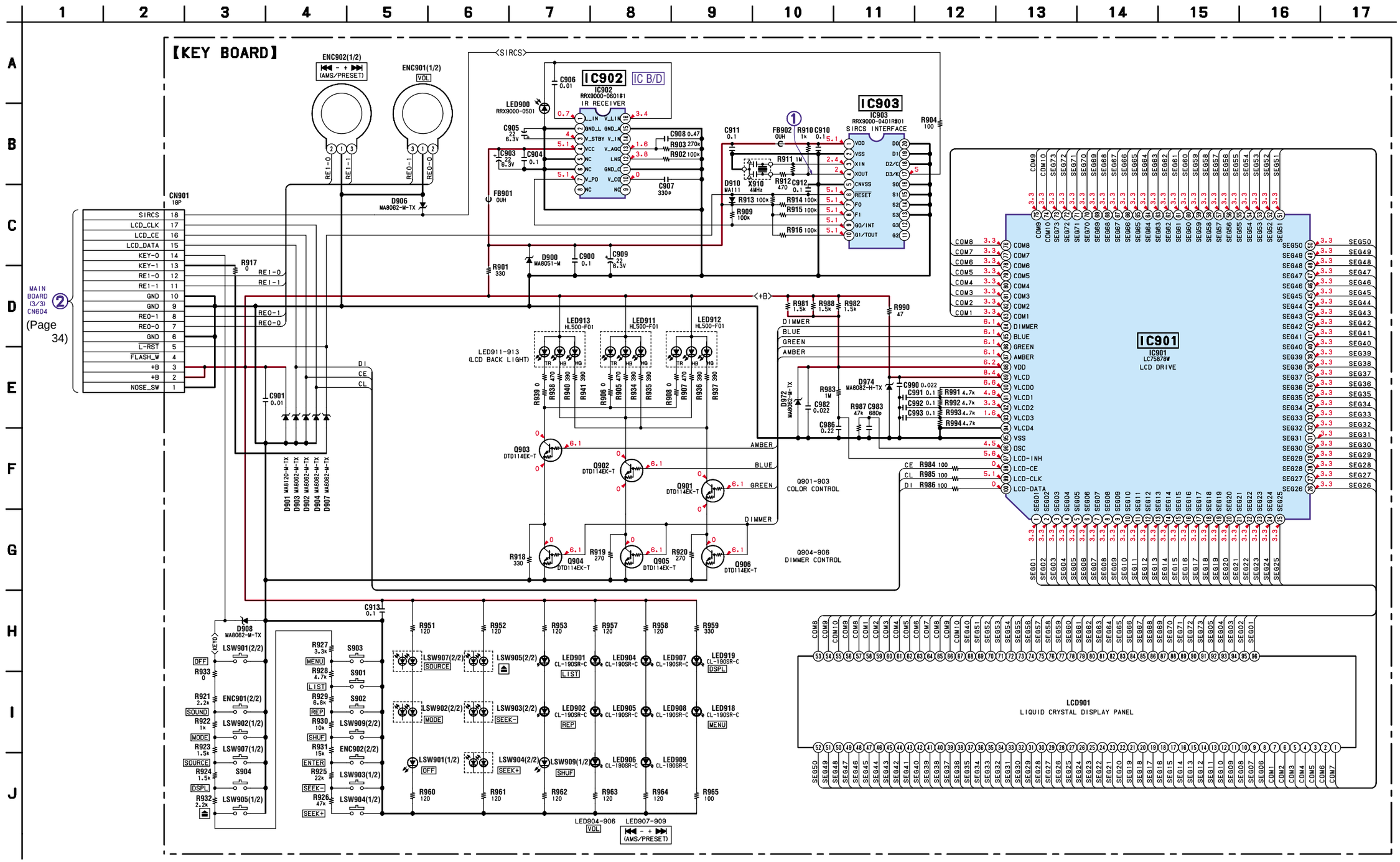
4-12. SCHEMATIC DIAGRAM — MAIN SECTION (3/3) —

• Refer to page 43 for IC Block Diagrams.



4-13. SCHEMATIC DIAGRAM — DISPLAY SECTION —

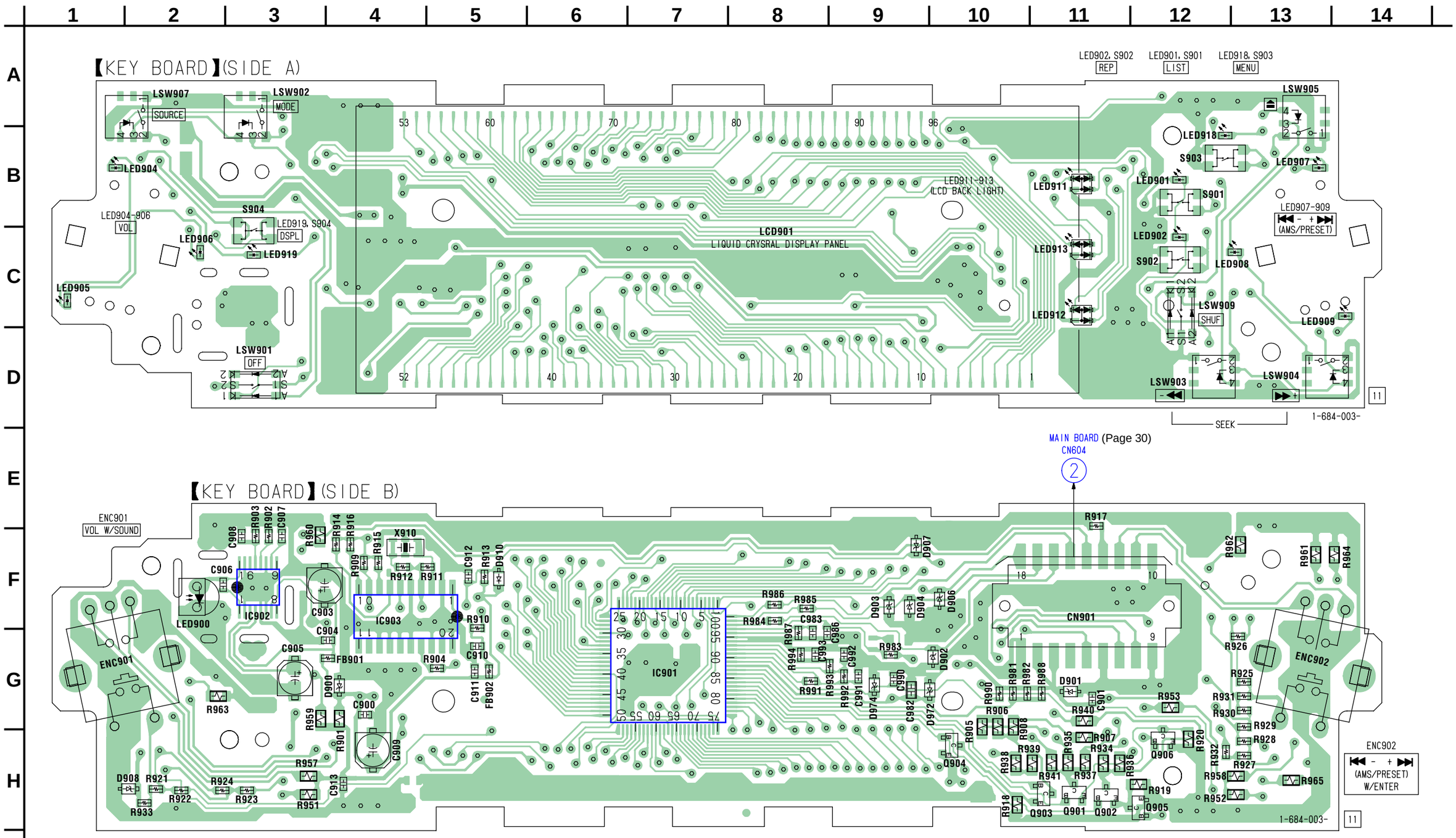
• Refer to page 25 for Waveform.
• Refer to page 43 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
  no mark : FM

4-14. PRINTED WIRING BOARD — DISPLAY SECTION — • Refer to page 25 for Circuit Boards Location.

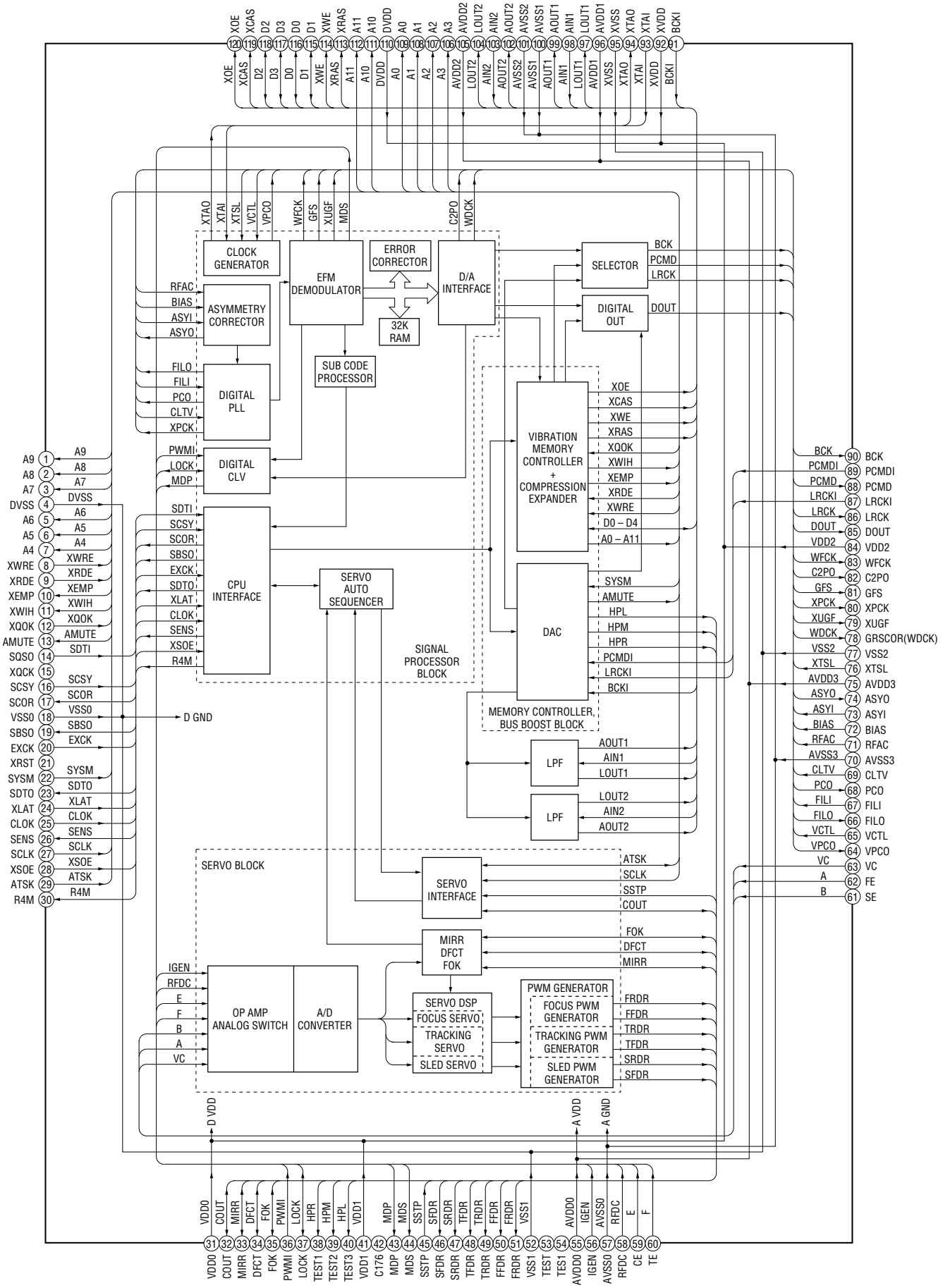


• **Semiconductor Location**

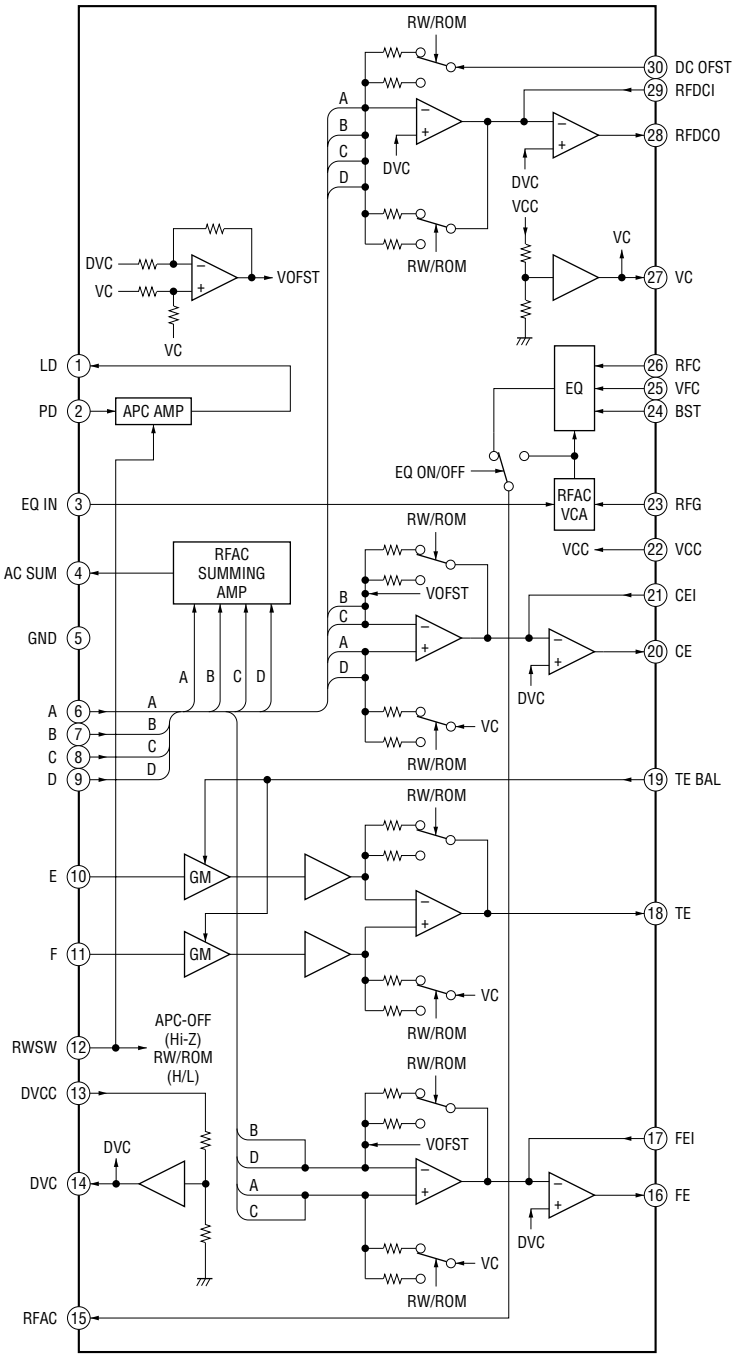
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D900	G-4	D910	F-5	LED900	F-2	LED908	C-13	Q901	H-11
D901	G-11	D972	G-10	LED901	B-12	LED909	C-13	Q902	H-11
D902	G-10	D974	G-9	LED902	C-12	LED911	B-11	Q903	H-11
D903	F-9			LED904	B-2	LED912	C-11	Q904	H-10
D904	F-9	IC901	G-7	LED905	C-1	LED913	C-11	Q905	H-12
D906	F-10	IC902	F-3	LED906	C-2	LED918	B-12	Q906	H-12
D907	F-9	IC903	F-4	LED907	B-13	LED919	C-3		
D908	H-2								

• IC BLOCK DIAGRAMS

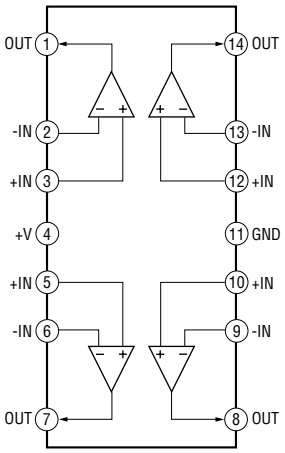
IC1 CXD3027R



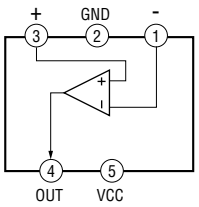
IC2 CXA2581N-T4



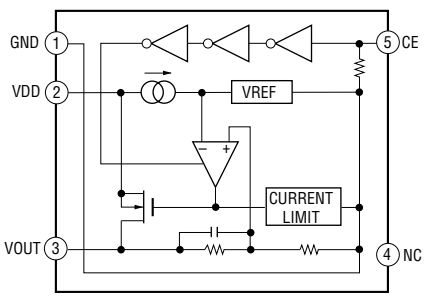
IC3 NJM12902V-TE2



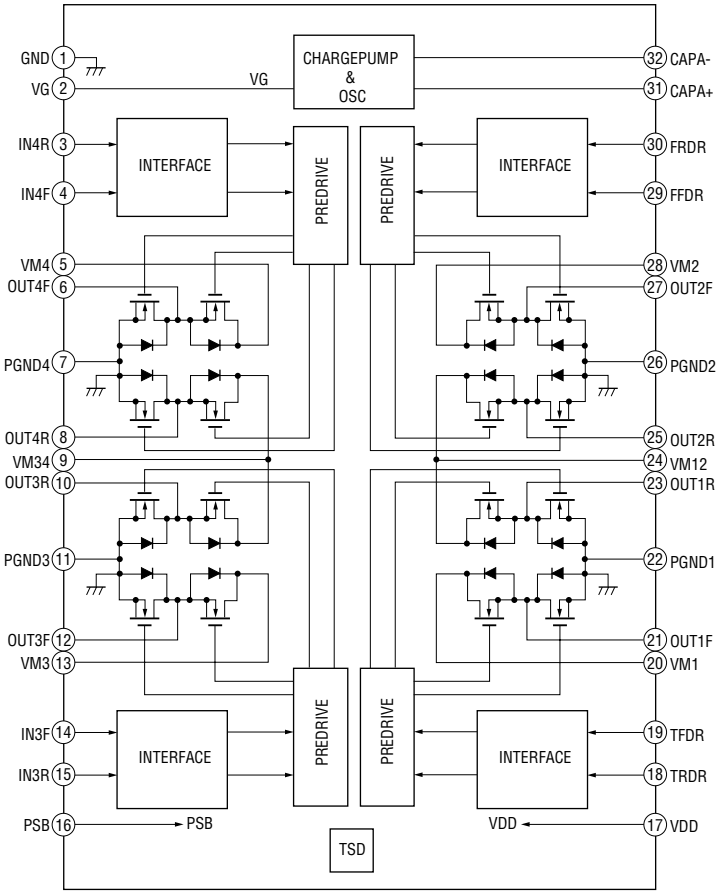
IC9 TC75S57F (TE85R)



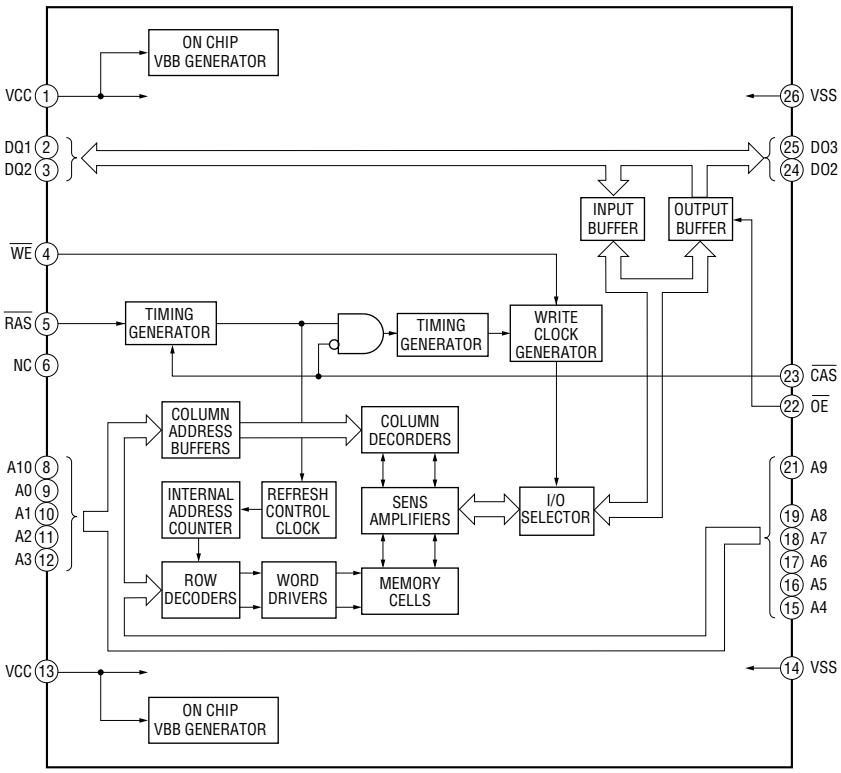
IC7 RN5RZ20BA
IC12 RN5RZ25BA



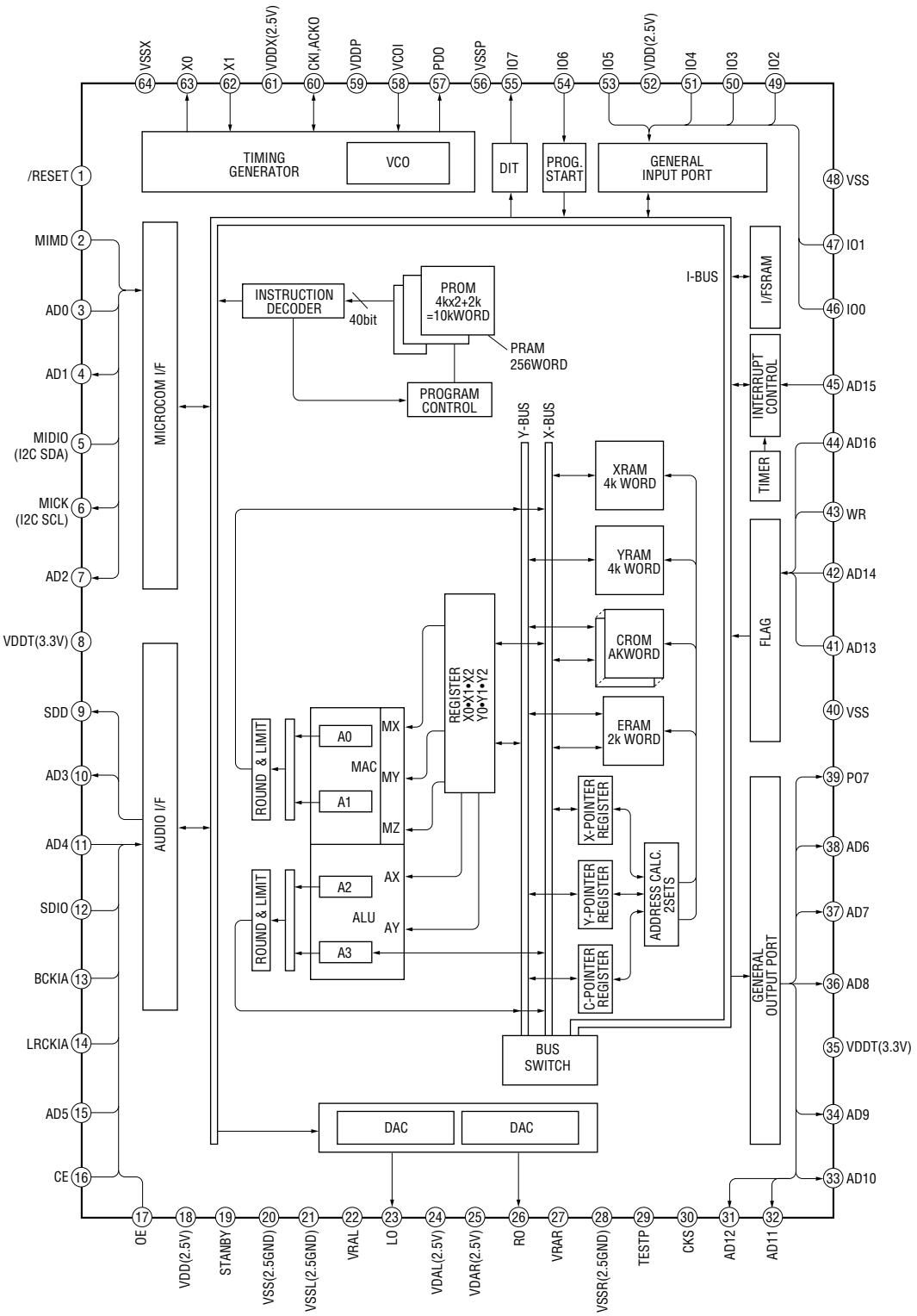
IC8 BH6518FS



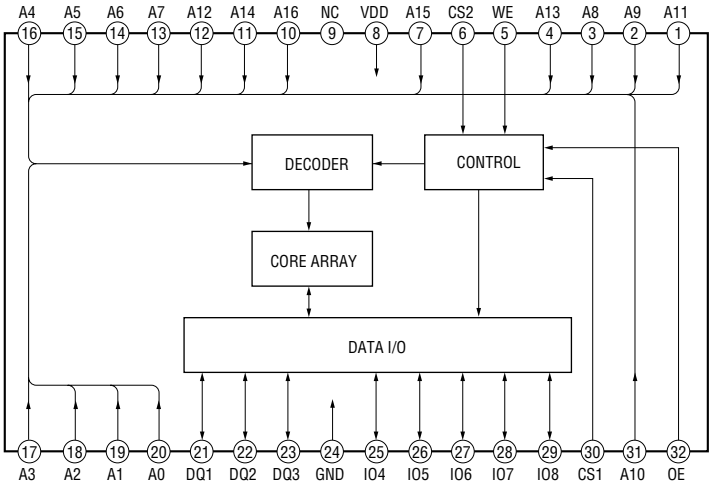
IC6 MSM51V17400D-10TK-FS



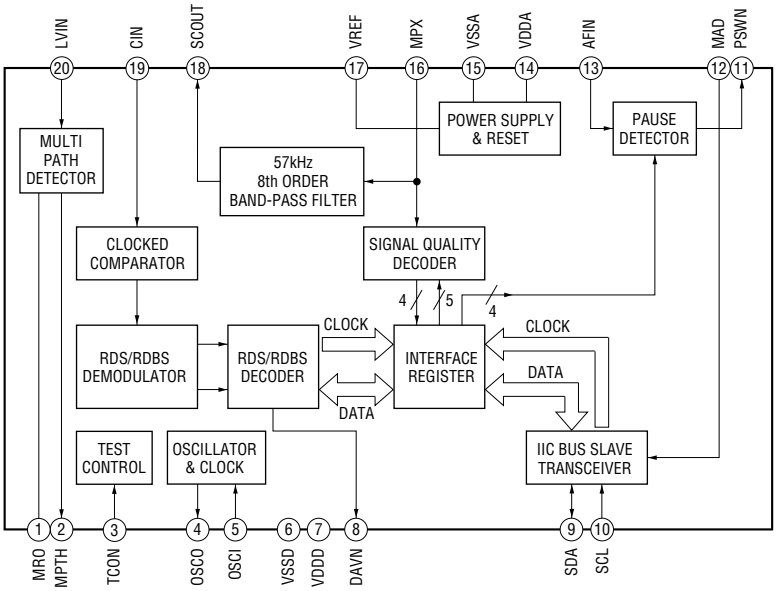
IC5 CXD9684R-004



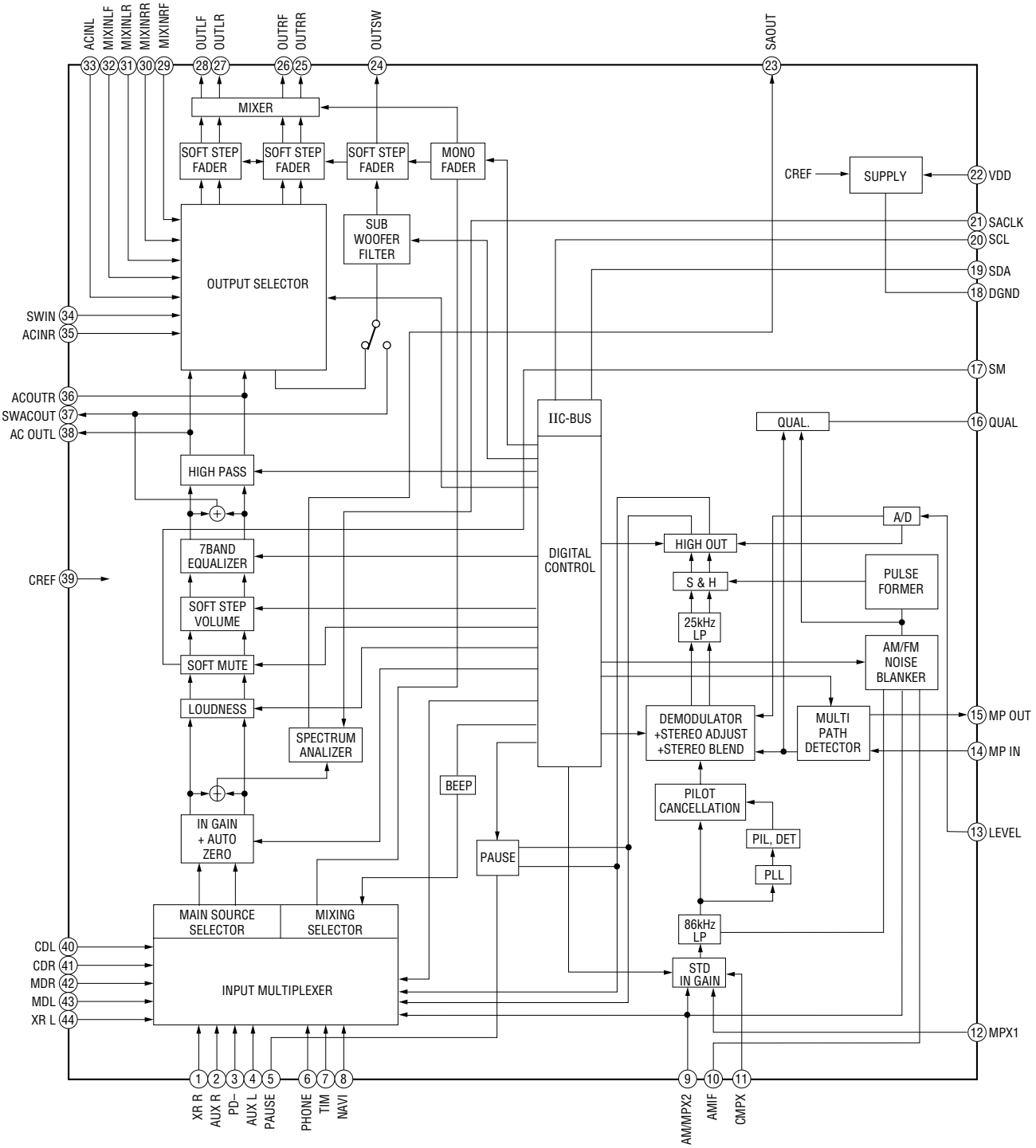
IC4 W24L010AT-12



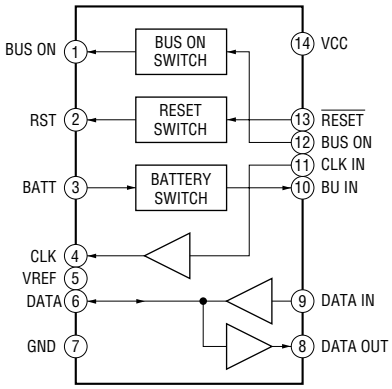
IC202 SAA6588T/V2



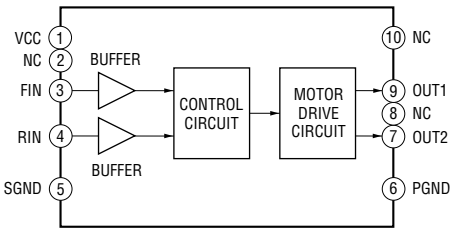
IC305 TDA7406T



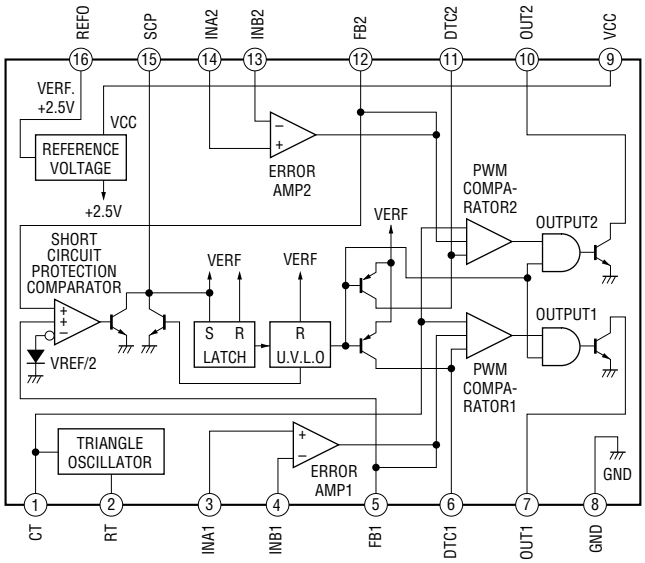
IC601 BA8270F



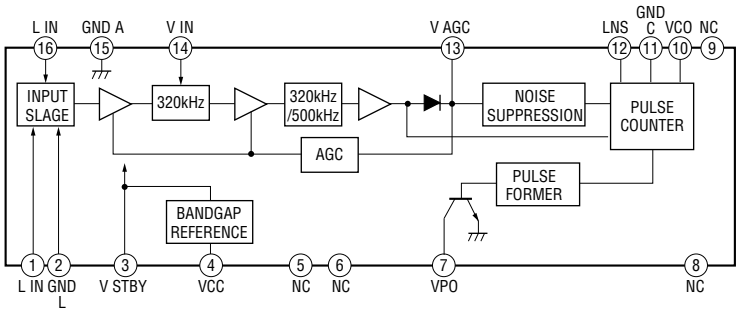
IC653 LB1930M
IC654 LB1930M



IC101 TL1451ACDB



IC902 RRX9000-0601#1



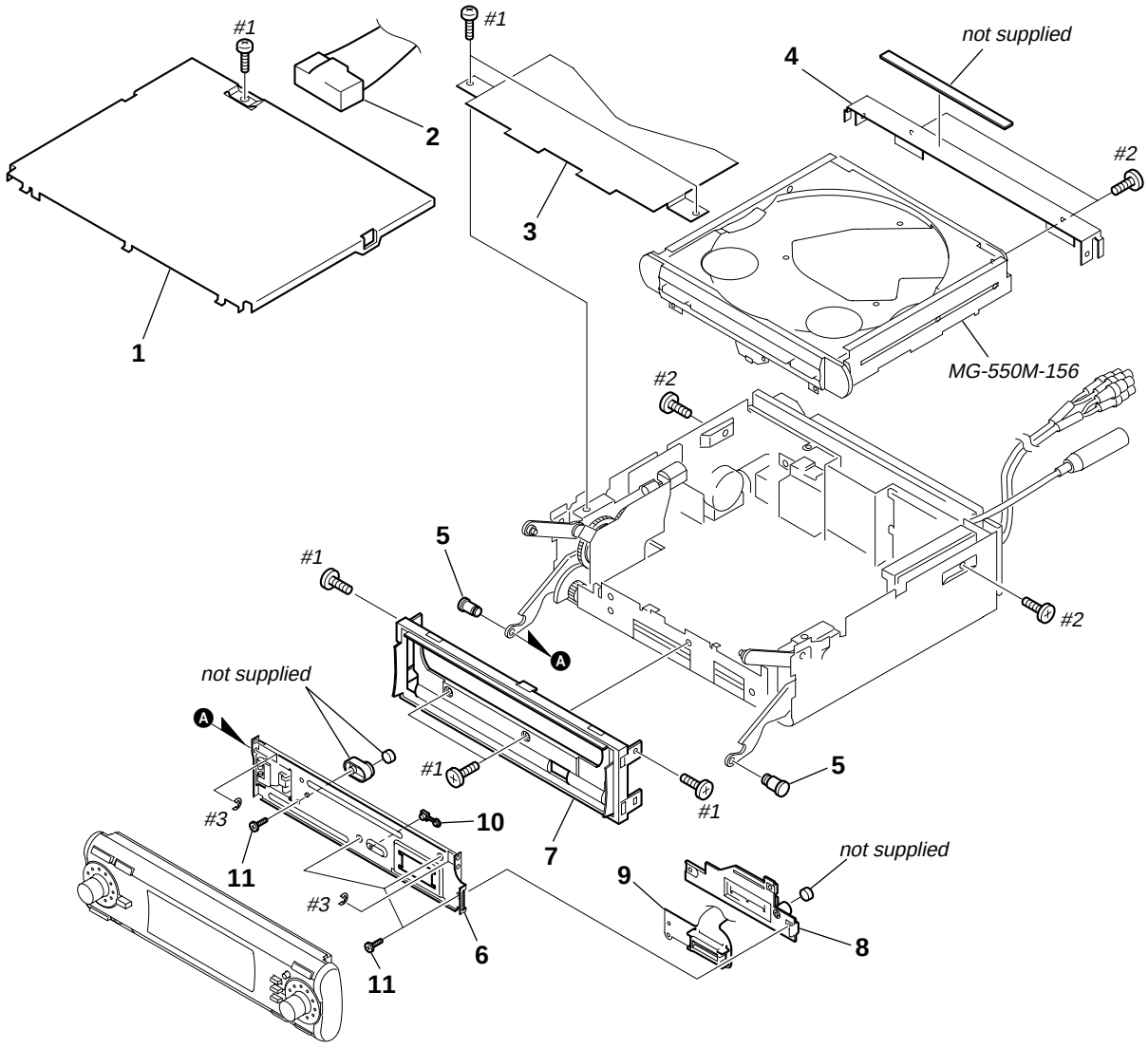
SECTION 5
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND: Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

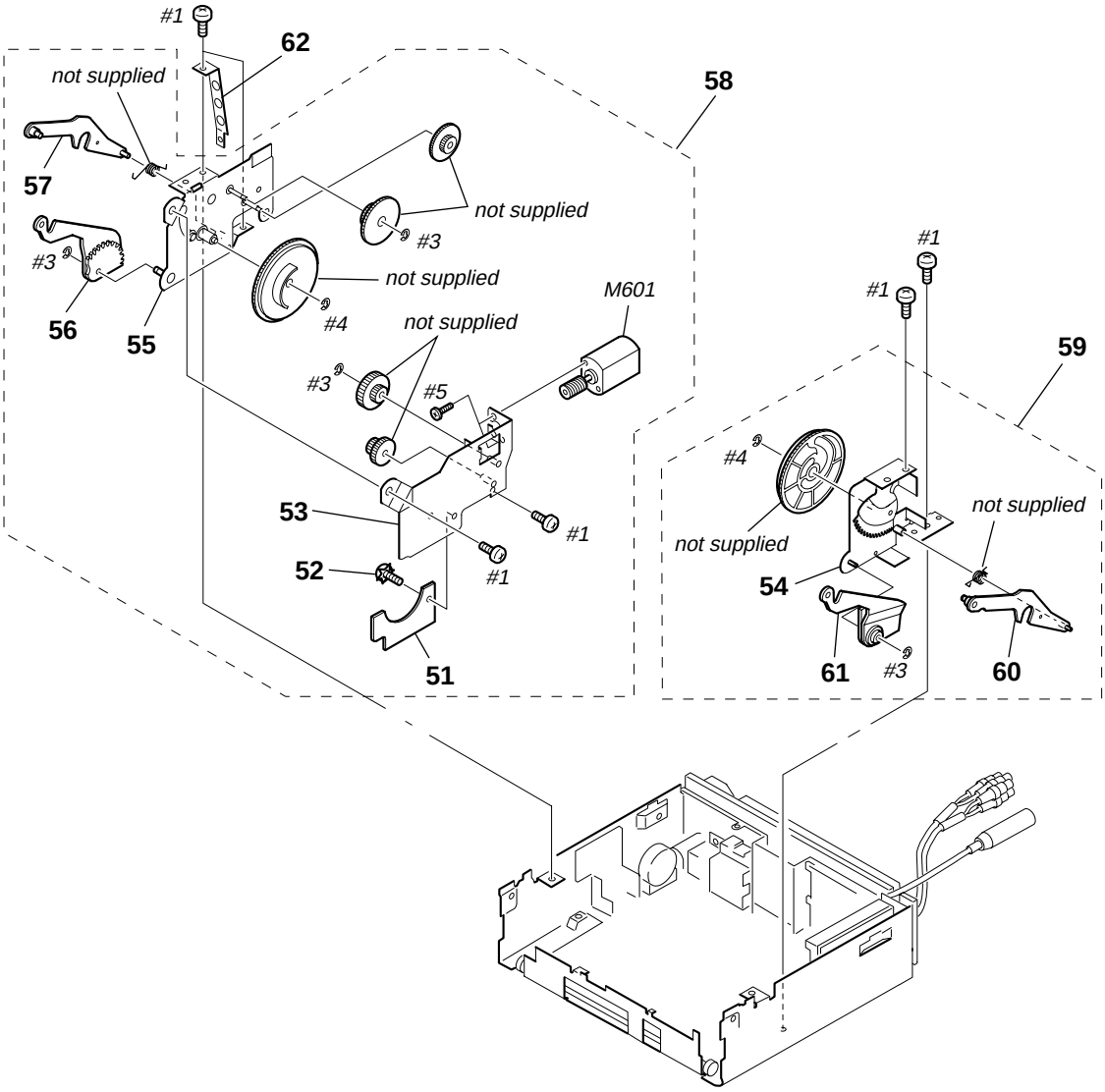
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

5-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-236-999-01	COVER	
2	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US,CND)	
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP,UK)
3	3-236-998-01	BRACKET (COVER)	
4	3-236-963-01	BRACKET (TRAY)	
5	3-242-600-01	SHAFT (BASE PANEL, D)	
6	X-3381-363-1	PANEL ASSY, BASE	
7	3-236-978-01	PLATE (CD), SUB	
8	3-237-000-01	COVER (PANEL)	
9	1-761-522-11	FLEXIBLE BOARD	
10	3-237-001-01	BUTTON (RESET)	
11	3-230-416-01	SCREW	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-09	SCREW +PTT 2.6X4 (S)	
#3	7-624-104-04	STOP RING 2.0, TYPE -E	

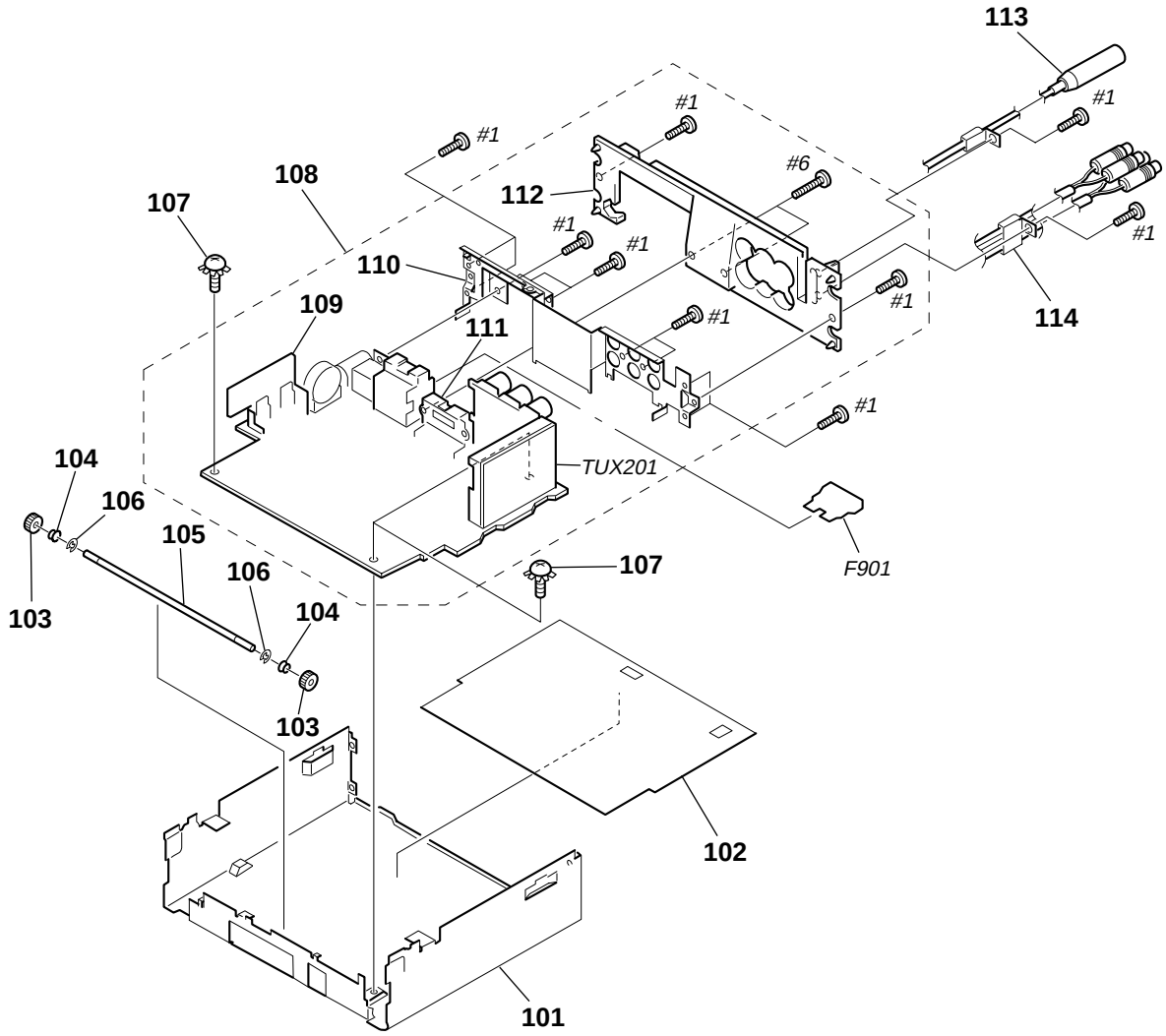
5-2. CAM SECTION



Ref. No.	Part No.	Description	Remark
51	A-3340-310-A	SWITCH BOARD, COMPLETE	
52	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
53	X-3381-368-1	BRACKET (SUB L) (RIVETING) ASSY	
54	X-3381-360-1	BRACKET (MAIN R) ASSY	
55	X-3381-359-1	BRACKET (MAIN L) ASSY	
56	X-3381-599-1	ARM (D.L) ASSY	
57	X-3381-364-1	ARM (U.L) ASSY	
58	A-3315-490-A	MOTOR BLOCK ASSY	
59	A-3315-491-A	CAM BLOCK ASSY	

Ref. No.	Part No.	Description	Remark
60	X-3381-365-1	ARM (U.R) ASSY	
61	X-3381-600-1	ARM (D.R) ASSY	
62	3-238-628-01	COVER (PROTECTION)	
M601	A-3315-488-A	MOTOR ASSY (OPEN/CLOSE)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#3	7-624-104-04	STOP RING 2.0, TYPE -E	
#4	7-624-106-04	STOP RING 3.0, TYPE -E	
#5	7-627-553-28	SCREW, PRECISION +P 2X2.5	

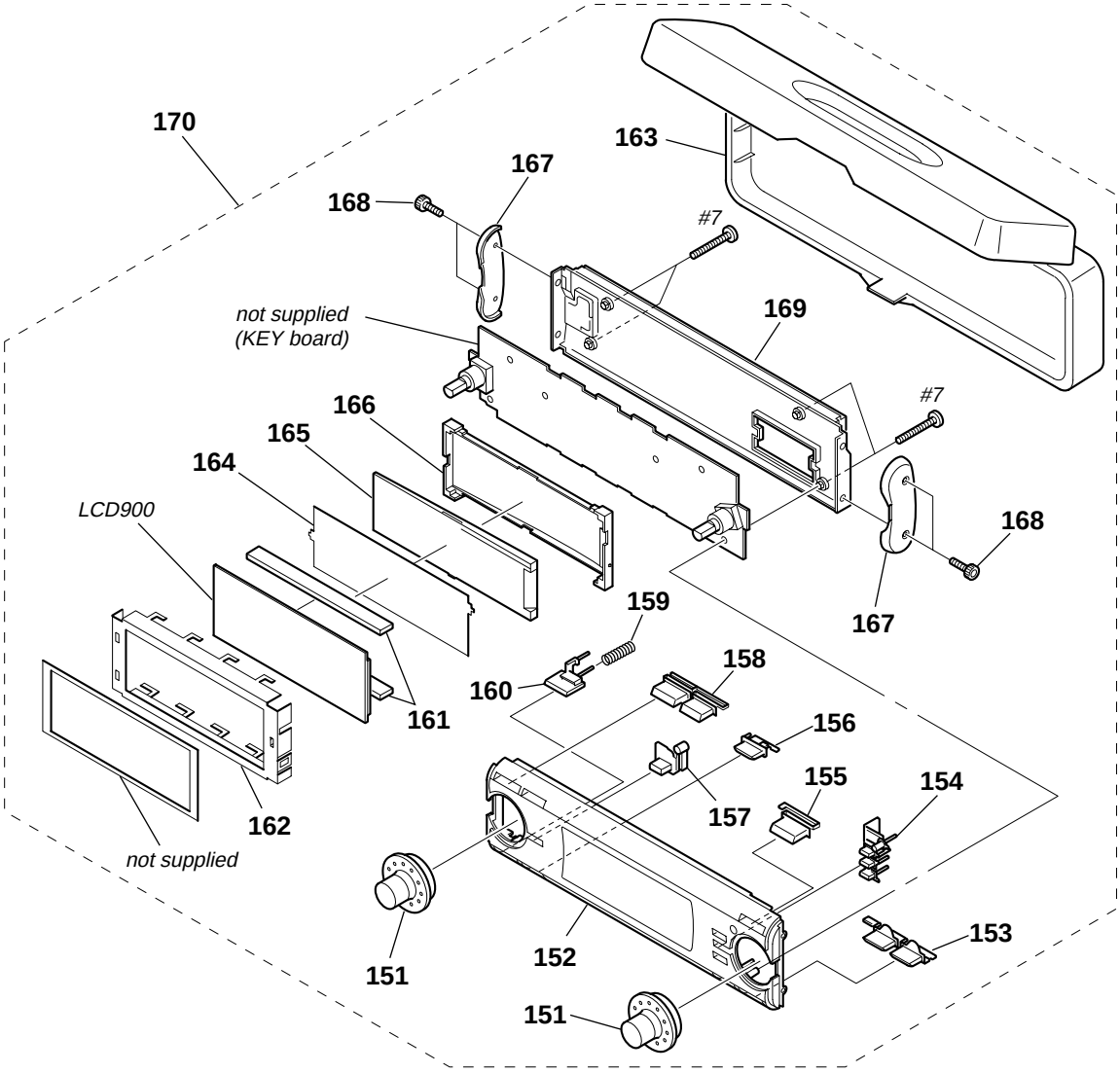
5-3. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark
101	X-3381-657-1	CHASSIS (CD.S) ASSY	
* 102	3-230-417-01	SHEET, INSULATING	
103	3-230-493-01	GEAR (DRIVE SHAFT)	
104	3-230-444-01	GUIDE (DRIVE SHAFT)	
105	3-045-721-01	SHAFT, DRIVE	
106	3-040-692-01	RING, CE TYPE RETAINING	
107	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
108	A-3283-269-A	MAIN BOARD, COMPLETE (AEP,UK)	
108	A-3283-307-A	MAIN BOARD, COMPLETE (US,CND)	
* 109	3-230-513-01	HEAT SINK (REG)	
* 110	3-230-509-01	CHASSIS, BACK	

Ref. No.	Part No.	Description	Remark
* 111	3-019-565-01	BRACKET (IC)	
112	3-230-510-11	HEAT SINK	
113	1-777-246-41	CORD (WITH CONNECTOR) (ANT) (AEP,UK)	
114	1-757-775-11	CORD (WITH CONNECTOR) (SUB OUT (MONO), AUX IN) (AEP,UK)	
114	1-757-775-31	CORD (WITH CONNECTOR) (SUB OUT (MONO), AUX IN) (US,CND)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TUX201	A-3282-062-A	TUNER UNIT (TUX-020)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#6	7-685-794-09	SCREW +PTT 2.6X10 (S)	

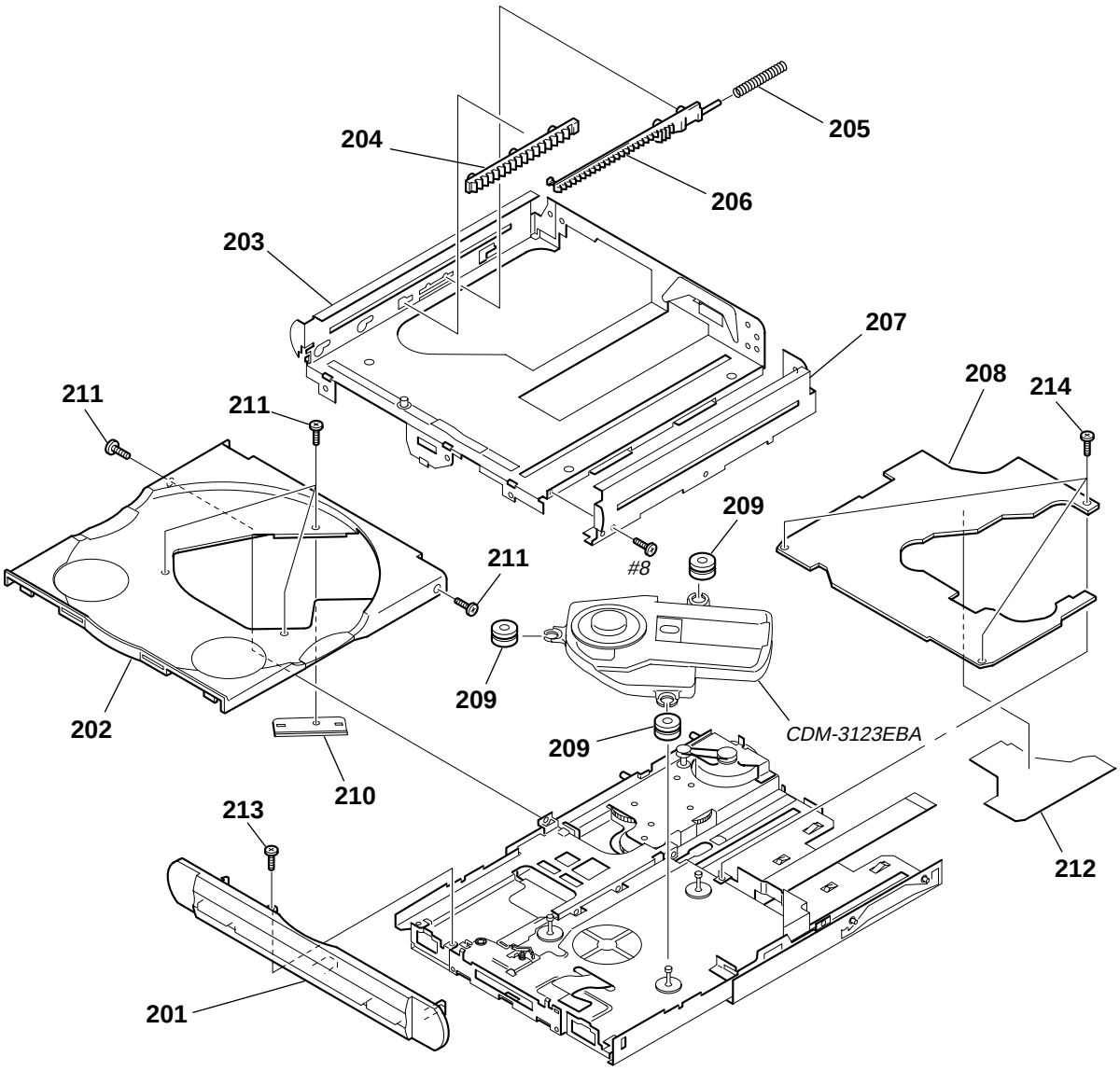
5-4. FRONT PANEL ASSY SECTION



Ref. No.	Part No.	Description	Remark
151	X-3381-583-1	KNOB (VOL) ASSY	
152	X-3381-596-1	PANEL ASSY, FRONT (AEP,UK)	
152	X-3381-944-1	PANEL ASSY, FRONT (US,CND)	
153	3-236-974-01	BUTTON (SEEK)	
154	3-236-975-01	BUTTON (MENU) (AEP,UK)	
154	3-236-975-11	BUTTON (MENU) (US,CND)	
155	3-236-973-01	BUTTON (EJECT)	
156	3-236-972-01	BUTTON (OFF)	
157	3-236-971-01	BUTTON (DSPL)	
158	3-236-970-01	BUTTON (SOURCE/MODE)	
159	3-013-634-01	SPRING (RELEASE)	
160	3-236-968-01	BUTTON (RELEASE)	
161	1-694-903-11	CONDUCTIVE BOARD, CONNECTION	

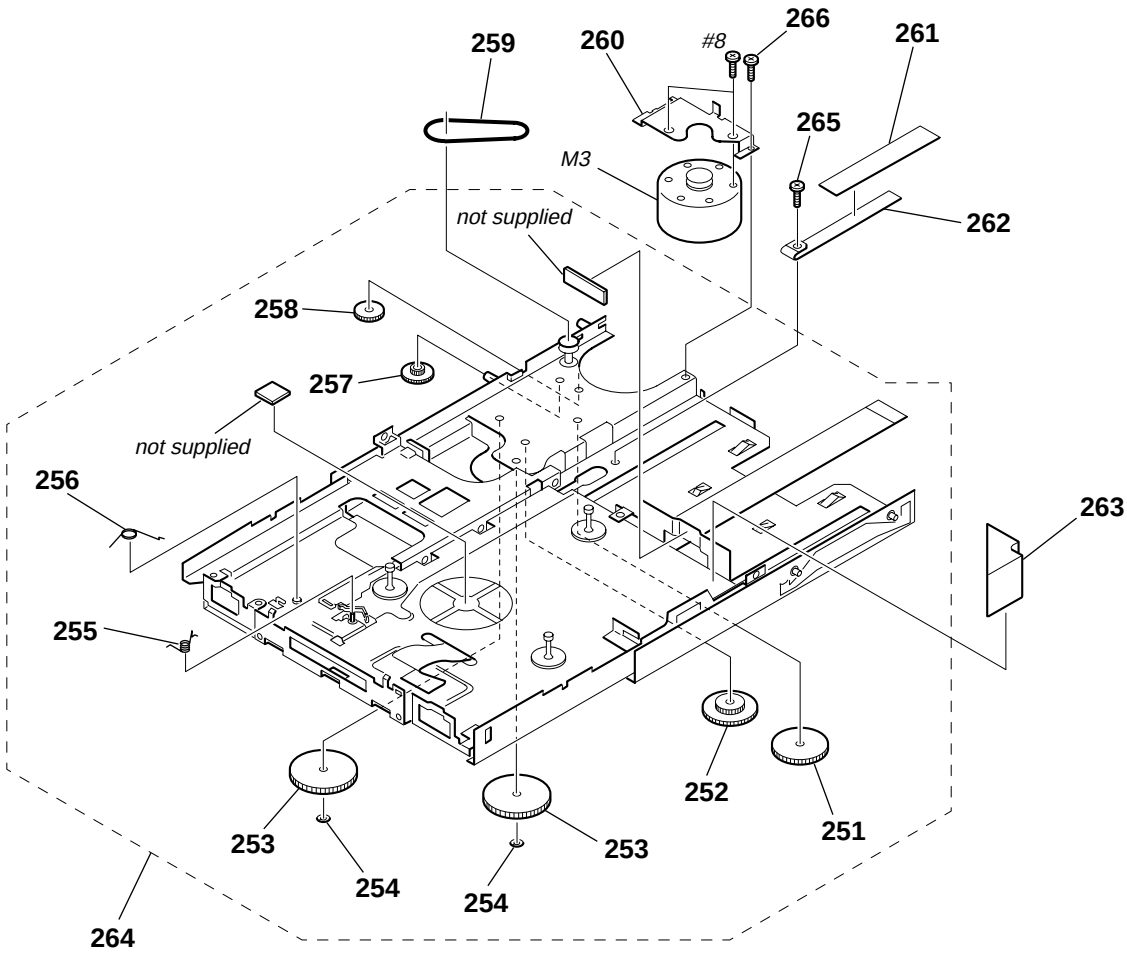
Ref. No.	Part No.	Description	Remark
162	3-236-990-01	PLATE (LCD), GROUND	
163	X-3381-407-1	CASE ASSY (for FRONT PANEL)	
164	3-236-992-01	SHEET (DIFFUSION)	
165	3-236-989-01	PLATE (LCD), LIGHT GUIDE	
166	3-236-991-01	HOLDER (LCD)	
167	3-237-002-01	PLATE, ORNAMENTAL	
168	3-238-973-01	SCREW, ORNAMENTAL	
169	3-236-993-01	PLATE, FRONT BACK	
170	A-3337-058-A	PANEL COMPLETE ASSY, FRONT (AEP,UK)	
170	A-3290-880-A	PANEL COMPLETE ASSY, FRONT (US,CND)	
LCD901	1-804-644-11	DISPLAY PANEL, LIQUID CRYSTAL	
#7	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

5-5. CD MECHANISM SECTION (1)
(MG-550M-156)



Ref. No.	Part No.	Description	Remark
201	X-3381-055-1	PANEL (S) ASSY	
202	X-3381-023-1	TRAY (UM) ASSY	
203	X-3381-029-1	CHASSIS (ML) ASSY	
204	3-234-353-01	RACK (M)	
205	3-234-328-01	SPRING, COMPRESSION	
206	3-234-326-01	RACK (SUB M)	
207	3-234-352-01	CHASSIS (MR)	
208	A-3340-216-A	SERVO BOARD, COMPLETE	
209	3-235-473-01	INSULATOR	
210	3-235-454-01	SPRING (LC-M), PLATE	
211	2-134-636-31	SCREW (M1.7X2.5)	
212	3-236-286-01	COVER (BOARD)	
213	2-626-869-01	SCREW (M2X3), SERRATION	
214	4-628-646-11	SCREW (M2X3.5), TOOTHED LOCK (+) P	
#8	7-627-852-38	SCREW, PRECISION +P 1.7X1.8 TYPE3	

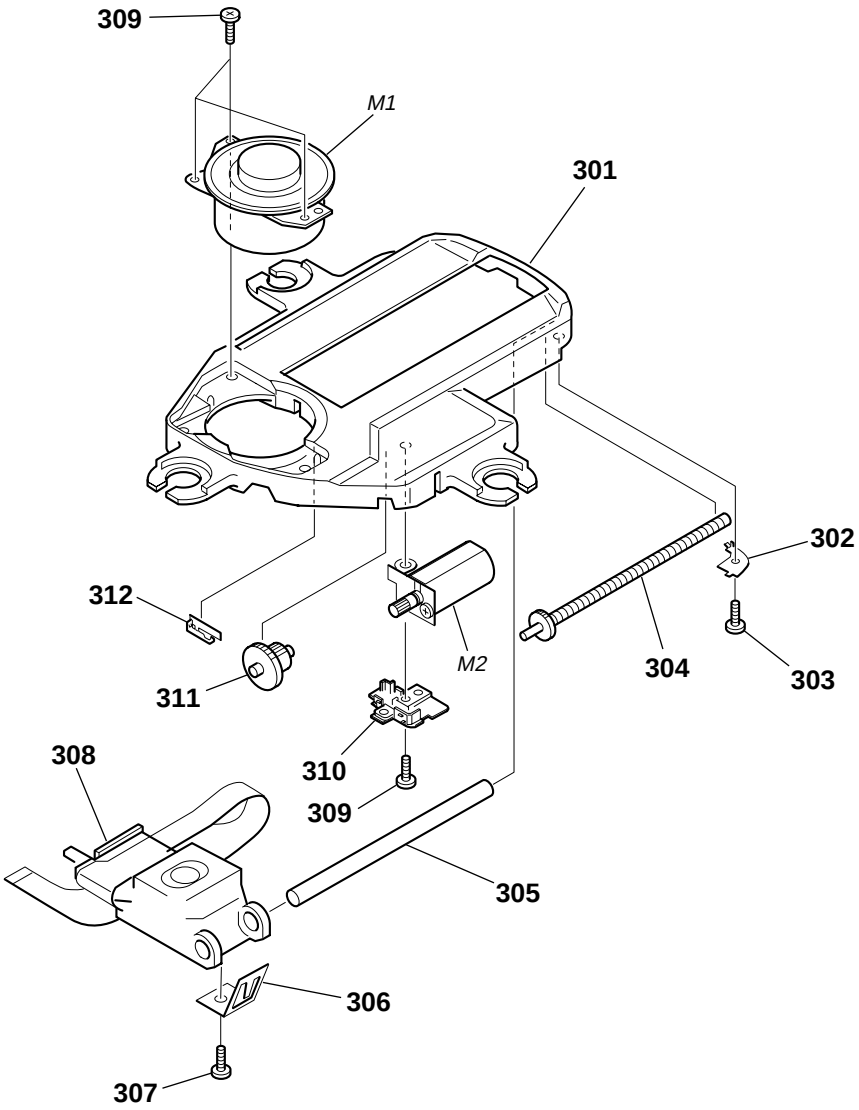
5-6. CD MECHANISM SECTION (2)
(MG-550M-156)



Ref. No.	Part No.	Description	Remark
251	3-234-340-01	GEAR (4)	
252	3-234-339-01	GEAR (5)	
253	3-234-330-01	GEAR (6)	
254	3-321-813-01	WASHER, COTTER POLYETHYLENE	
255	3-234-327-01	SPRING (LEVER LOCK), TORSION	
256	3-234-331-01	SPRING (SUB RACK D), TORSION	
257	3-234-337-01	GEAR (2)	
258	3-234-338-01	GEAR (3)	
259	3-234-336-01	BELT (L)	

Ref. No.	Part No.	Description	Remark
260	3-234-348-01	BRACKET (MOTOR)	
261	3-241-004-01	CUSHION (FPC), SARANET	
262	1-763-734-11	MOTOR, FPC	
263	3-240-564-01	CUSHION (CORNER)	
264	X-3381-224-1	BLOCK (M) ASSY, TRAY	
265	3-236-897-01	SCREW	
266	4-639-357-21	SCREW (M1.7)	
M3	X-3381-240-1	MOTOR ASSY, LE (LOADING)	
#8	7-627-852-38	SCREW, PRECISION +P 1.7X1.8 TYPE3	

5-7. CD MECHANISM DECK SECTION (CDM-3123EBA)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
301	4-218-820-01	CHASSIS	
302	4-218-827-02	RETAINER, SHAFT	
303	3-686-458-03	SCREW (P1.4X3.5), TAPPING	
304	A-3328-628-A	SCREW (FEED) ASSY	
305	4-220-645-02	SHAFT, STANDARD	
306	4-223-600-01	RACK	
307	3-895-823-61	SCREW (B1.4X2.3), TAPPING	
⚠308	X-4952-506-1	RP ASSY, DAX-23E	
309	3-318-203-71	SCREW (B1.7X5), TAPPING	
310	4-218-821-01	COVER, GEAR	
311	4-218-823-01	GEAR (B)	
312	4-218-825-01	SPRING, SLED	
M1	A-3328-759-A	MOTOR ASSY, TURNTABLE (SPINDLE)	
M2	A-3328-627-A	MOTOR ASSY, SLED (SLED)	

SECTION 6
ELECTRICAL PARTS LIST

KEY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  CND: Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
	1-694-903-11	CONDUCTIVE BOARD, CONNECTION			
*	3-227-280-01	CASE (IR-T), SHIELD			
	3-236-989-01	PLATE (LCD), LIGHT GUIDE			
	3-236-990-01	PLATE (LCD), GROUND			
	3-236-991-01	HOLDER (LCD)			
	3-236-992-01	SHEET (DIFFUSION)			
		< CAPACITOR >			
C900	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C901	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C903	1-135-852-21	ELECT CHIP	22uF	20%	6.3V
C904	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C905	1-135-852-21	ELECT CHIP	22uF	20%	6.3V
C906	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C907	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C908	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C909	1-135-852-21	ELECT CHIP	22uF	20%	6.3V
C910	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C911	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C912	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C913	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C982	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C983	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C986	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C990	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C991	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C992	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C993	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN901	1-778-183-11	PLUG, CONNECTOR 18P			
		< DIODE >			
D900	8-719-420-90	DIODE MA8051-M			
D901	8-719-423-32	DIODE MA8120-M			
D902	8-719-422-64	DIODE MA8062-M			
D903	8-719-422-64	DIODE MA8062-M			
D904	8-719-422-64	DIODE MA8062-M			
D906	8-719-422-64	DIODE MA8062-M			
D907	8-719-422-64	DIODE MA8062-M			
D908	8-719-422-64	DIODE MA8062-M			
D910	8-719-404-50	DIODE MA111-TX			
D972	8-719-422-64	DIODE MA8062-M			
D974	8-719-422-89	DIODE MA8082-H-TX			
		< ROTARY ENCODER >			
ENC901	1-475-235-31	ENCODER, ROTARY (VOL, SOUND)			
ENC902	1-475-235-31	ENCODER, ROTARY (AMS/PRESET, ENTER)			
		< FERRITE BEAD >			
FB901	1-414-921-11	INDUCTOR, FERRITE BEAD			
FB902	1-414-921-11	INDUCTOR, FERRITE BEAD			
		< IC >			
IC901	8-759-653-26	IC LC75878W			
IC902	8-759-830-18	IC RRX9000-0601#1			
IC903	8-759-830-17	IC RRX9000-0401R#01			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-804-644-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< DIODE >			
LED900	8-719-083-14	LED RRX9000-0501			
LED901	8-719-061-16	LED CL-190SR-CD-T (LIST)			
LED902	8-719-061-16	LED CL-190SR-CD-T (REP)			
LED904	8-719-061-16	LED CL-190SR-CD-T (VOL)			
LED905	8-719-061-16	LED CL-190SR-CD-T (VOL)			
LED906	8-719-061-16	LED CL-190SR-CD-T (VOL)			
LED907	8-719-061-16	LED CL-190SR-CD-T (I◀◀ – + ▶▶I (AMS/PRESET))			
LED908	8-719-061-16	LED CL-190SR-CD-T (I◀◀ – + ▶▶I (AMS/PRESET))			
LED909	8-719-061-16	LED CL-190SR-CD-T (I◀◀ – + ▶▶I (AMS/PRESET))			
LED911	6-500-085-01	LED HL500-F01 (LCD BACK LIGHT)			
LED912	6-500-085-01	LED HL500-F01 (LCD BACK LIGHT)			
LED913	6-500-085-01	LED HL500-F01 (LCD BACK LIGHT)			
LED918	8-719-061-16	LED CL-190SR-CD-T (MENU)			
LED919	8-719-061-16	LED CL-190SR-CD-T (DSPL)			
		< SWITCH >			
LSW901	1-771-883-11	SWITCH, TACTILE (WITH LED) (OFF)			
LSW902	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (MODE)			
LSW903	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEEK –)			
LSW904	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SEEK +)			
LSW905	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (⏏)			

KEY MAIN

Ref. No.	Part No.	Description			Remark
LSW907	1-771-476-11	SWITCH, KEYBOARD (WITH LED) (SOURCE)			
LSW909	1-771-883-11	SWITCH, TACTILE (WITH LED) (SHUF)			
		< TRANSISTOR >			
Q901	8-729-904-75	TRANSISTOR DTD114EK			
Q902	8-729-904-75	TRANSISTOR DTD114EK			
Q903	8-729-904-75	TRANSISTOR DTD114EK			
Q904	8-729-904-75	TRANSISTOR DTD114EK			
Q905	8-729-904-75	TRANSISTOR DTD114EK			
Q906	8-729-904-75	TRANSISTOR DTD114EK			
		< RESISTOR >			
R901	1-216-037-00	METAL CHIP	330	5%	1/10W
R902	1-216-845-11	METAL CHIP	100K	5%	1/16W
R903	1-216-850-11	METAL CHIP	270K	5%	1/16W
R904	1-216-809-11	METAL CHIP	100	5%	1/16W
R905	1-216-041-00	METAL CHIP	470	5%	1/10W
R906	1-216-295-00	SHORT	0		
R907	1-216-041-00	METAL CHIP	470	5%	1/10W
R908	1-216-295-00	SHORT	0		
R909	1-216-845-11	METAL CHIP	100K	5%	1/16W
R910	1-216-821-11	METAL CHIP	1K	5%	1/16W
R911	1-216-857-11	METAL CHIP	1M	5%	1/16W
R912	1-216-817-11	METAL CHIP	470	5%	1/16W
R913	1-216-845-11	METAL CHIP	100K	5%	1/16W
R914	1-216-845-11	METAL CHIP	100K	5%	1/16W
R915	1-216-845-11	METAL CHIP	100K	5%	1/16W
R916	1-216-845-11	METAL CHIP	100K	5%	1/16W
R917	1-216-864-11	METAL CHIP	0	5%	1/16W
R918	1-216-037-00	METAL CHIP	330	5%	1/10W
R919	1-216-035-00	METAL CHIP	270	5%	1/10W
R920	1-216-035-00	METAL CHIP	270	5%	1/10W
R921	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R922	1-216-821-11	METAL CHIP	1K	5%	1/16W
R923	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R924	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R925	1-216-837-11	METAL CHIP	22K	5%	1/16W
R926	1-216-841-11	METAL CHIP	47K	5%	1/16W
R927	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R928	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R929	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R930	1-216-833-11	METAL CHIP	10K	5%	1/16W
R931	1-216-835-11	METAL CHIP	15K	5%	1/16W
R932	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R933	1-216-864-11	METAL CHIP	0	5%	1/16W
R934	1-216-039-00	METAL CHIP	390	5%	1/10W
R935	1-216-039-00	METAL CHIP	390	5%	1/10W
R936	1-216-039-00	METAL CHIP	390	5%	1/10W
R937	1-216-039-00	METAL CHIP	390	5%	1/10W
R938	1-216-041-00	METAL CHIP	470	5%	1/10W
R939	1-216-295-00	SHORT	0		
R940	1-216-039-00	METAL CHIP	390	5%	1/10W
R941	1-216-039-00	METAL CHIP	390	5%	1/10W
R951	1-216-027-00	METAL CHIP	120	5%	1/10W
R952	1-216-027-00	METAL CHIP	120	5%	1/10W
R953	1-216-027-00	METAL CHIP	120	5%	1/10W
R957	1-216-027-00	METAL CHIP	120	5%	1/10W
R958	1-216-027-00	METAL CHIP	120	5%	1/10W
R959	1-216-037-00	METAL CHIP	330	5%	1/10W
R960	1-216-027-00	METAL CHIP	120	5%	1/10W
R961	1-216-027-00	METAL CHIP	120	5%	1/10W
R962	1-216-027-00	METAL CHIP	120	5%	1/10W
R963	1-216-027-00	METAL CHIP	120	5%	1/10W
R964	1-216-027-00	METAL CHIP	120	5%	1/10W
R965	1-216-025-11	RES-CHIP	100	5%	1/10W
R981	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R982	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R983	1-216-857-11	METAL CHIP	1M	5%	1/16W
R984	1-216-809-11	METAL CHIP	100	5%	1/16W
R985	1-216-809-11	METAL CHIP	100	5%	1/16W
R986	1-216-809-11	METAL CHIP	100	5%	1/16W
R987	1-216-841-11	METAL CHIP	47K	5%	1/16W
R988	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R990	1-216-805-11	METAL CHIP	47	5%	1/16W
R991	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R992	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R993	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R994	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
		< SWITCH >			
S901	1-771-884-11	SWITCH, TACTILE (WITH LED) (LIST)			
S902	1-771-884-11	SWITCH, TACTILE (WITH LED) (REP)			
S903	1-771-884-11	SWITCH, TACTILE (WITH LED) (MENU)			
S904	1-771-884-11	SWITCH, TACTILE (WITH LED) (DSPL)			
		< VIBRATOR >			
X910	1-781-646-21	VIBRATOR, CERAMIC (4MHz)			
**********					
	A-3283-269-A	MAIN BOARD, COMPLETE (AEP,UK)			
	A-3283-307-A	MAIN BOARD, COMPLETE (US,CND)			
		**********			
*	3-019-565-01	BRACKET (IC)			
*	3-230-509-01	CHASSIS, BACK			
	3-230-510-11	HEAT SINK			
*	3-230-513-01	HEAT SINK (REG)			
	7-685-792-09	SCREW +PTT 2.6X6 (S)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< BUZZER >			
BZ501	1-544-886-11	BUZZER			
		< CAPACITOR >			
C101	1-124-599-11	ELECT	220uF	20%	25V

Ref. No.	Part No.	Description			Remark
C103	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C104	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C105	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C106	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C107	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C108	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C109	1-124-570-11	ELECT	220uF	20%	16V
C110	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C111	1-115-156-11	CERAMIC CHIP	1uF		10V
C112	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C113	1-124-570-11	ELECT	220uF	20%	16V
C115	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C116	1-124-570-11	ELECT	220uF	20%	16V
C117	1-124-570-11	ELECT	220uF	20%	16V
C118	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C119	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C120	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C121	1-126-916-11	ELECT	1000uF	20%	6.3V
C122	1-125-565-11	DOUBLE LAYERS	0.22F		5.5V
C123	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C124	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C125	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C126	1-124-937-11	ELECT	10uF	20%	16V
C127	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C128	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C129	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C150	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C160	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C201	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C202	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C205	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C206	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C207	1-126-947-11	ELECT	47uF	20%	16V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C209	1-126-960-11	ELECT	1uF	20%	50V
C210	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C211	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C212	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C213	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C214	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V (AEP,UK)
C215	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V (AEP,UK)
C216	1-126-947-11	ELECT	47uF	20%	16V (AEP,UK)
C217	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (AEP,UK)
C218	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C219	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C220	1-162-924-11	CERAMIC CHIP	56PF	5%	50V (AEP,UK)
C221	1-162-924-11	CERAMIC CHIP	56PF	5%	50V (AEP,UK)
C222	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V (AEP,UK)
C223	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (AEP,UK)
C224	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C225	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C226	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP,UK)
C227	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V (AEP,UK)
C228	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (AEP,UK)
C229	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V (AEP,UK)
C230	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (AEP,UK)
C231	1-126-786-11	ELECT	47uF	20%	16V
C232	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C234	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C301	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C302	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C303	1-136-154-00	FILM	0.012uF	5%	50V
C304	1-136-154-00	FILM	0.012uF	5%	50V
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C307	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C308	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C309	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C310	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C313	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C314	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C315	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-124-233-11	ELECT	10uF	20%	16V
C317	1-126-964-11	ELECT	10uF	20%	50V
C318	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C319	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C320	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C323	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C324	1-126-964-11	ELECT	10uF	20%	50V
C325	1-124-233-11	ELECT	10uF	20%	16V
C328	1-126-964-11	ELECT	10uF	20%	50V
C329	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C331	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C332	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C333	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C335	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C337	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V

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Ref. No.	Part No.	Description			Remark
C338	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C341	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C343	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C344	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C345	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C347	1-124-465-00	ELECT	0.47uF	20%	50V
C348	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C349	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C350	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C353	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C357	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C358	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C359	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C360	1-126-934-11	ELECT	220uF	20%	10V
C361	1-126-964-11	ELECT	10uF	20%	50V
C363	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C364	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C365	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C366	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C371	1-126-960-11	ELECT	1uF	20%	50V
C373	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C374	1-126-947-11	ELECT	47uF	20%	16V
C375	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C376	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C377	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C378	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C379	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C380	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C381	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C382	1-124-570-11	ELECT	220uF	20%	16V
C383	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C384	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C385	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C386	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C387	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C388	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C392	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C393	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C394	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C395	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C396	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C397	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (AEP,UK)
C399	1-163-009-00	CERAMIC CHIP	0.001uF	10%	50V
C403	1-135-473-21	ELECT	3300uF	20%	16V
C406	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
C407	1-126-963-11	ELECT	4.7uF	20%	50V
C410	1-104-652-11	ELECT	470uF	20%	10V
C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C412	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C413	1-104-652-11	ELECT	470uF	20%	10V
C414	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C416	1-104-665-11	ELECT	100uF	20%	10V
C417	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C418	1-126-934-11	ELECT	220uF	20%	16V
C419	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C420	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C421	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C422	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V (AEP,UK)
C501	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V (US,CND)
C502	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C503	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C505	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C506	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C507	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C508	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C509	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C510	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C511	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C512	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C513	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C514	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C515	1-104-665-11	ELECT	100uF	20%	10V
C516	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C517	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C518	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C519	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C520	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C530	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C531	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C532	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C533	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C602	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C603	1-126-934-11	ELECT	220uF	20%	16V
C654	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C655	1-126-947-11	ELECT	47uF	20%	16V
C656	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C657	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C658	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C659	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C660	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C661	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C662	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C663	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C664	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C665	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C666	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C667	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C701	1-126-947-11	ELECT	47uF	20%	16V
C702	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C704	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			Remark
C705	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (AEP,UK)
C705	1-164-156-11	CERAMIC CHIP	0.1uF		25V (US,CND)
C706	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C707	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C708	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C709	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C710	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C711	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (US,CND)
C711	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (AEP,UK)
C712	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C713	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN101	1-774-701-11	PIN, CONNECTOR 16P			
* CN201	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN301	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN303	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN304	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN305	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
CN401	1-794-695-11	CONNECTOR, FFC/FPC 30P			
CN601	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
* CN602	1-566-761-11	PIN, CONNECTOR (PC BOARD) 6P			
CN604	1-793-014-21	CONNECTOR, FFC/FPC (ZIF) 20P			
		< JACK >			
CN302	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN,AUDIO OUT)			
		< DIODE >			
D101	8-719-055-30	DIODE D1FS4A-TA			
D102	8-719-055-30	DIODE D1FS4A-TA			
D104	8-719-801-78	DIODE 1SS184			
D105	8-719-060-81	DIODE MA735-TX			
D106	8-719-060-81	DIODE MA735-TX			
D107	8-719-422-43	DIODE MA8051-H			
D109	8-719-421-24	DIODE MA8039-H			
D150	8-719-977-03	DIODE DTZ5.6B			
D151	8-719-988-61	DIODE 1SS355TE-17			
D160	8-719-422-31	DIODE MA8047-M			
D202	8-719-988-61	DIODE 1SS355TE-17			
D203	8-719-422-41	DIODE MA8051-L-TX			
D204	8-719-800-76	DIODE 1SS226 (AEP,UK)			
D205	8-719-422-41	DIODE MA8051-L-TX (AEP,UK)			
D301	8-719-074-47	DIODE CRS02(TE85L)			
D302	8-719-074-47	DIODE CRS02(TE85L)			
D303	8-719-074-47	DIODE CRS02(TE85L)			
D304	8-719-074-47	DIODE CRS02(TE85L)			
D305	8-719-074-47	DIODE CRS02(TE85L)			
D306	8-719-074-47	DIODE CRS02(TE85L)			

Ref. No.	Part No.	Description	Remark
D307	8-719-074-47	DIODE CRS02(TE85L)	
D308	8-719-074-47	DIODE CRS02(TE85L)	
D311	8-719-988-61	DIODE 1SS355TE-17	
D391	8-719-977-12	DIODE DTZ6.8B	
D401	8-719-049-38	DIODE 1N5404TU	
D404	8-719-977-12	DIODE DTZ6.8B	
D405	8-719-053-18	DIODE 1SR154-400TE-25	
D406	8-719-053-18	DIODE 1SR154-400TE-25	
D407	8-719-988-61	DIODE 1SS355TE-17	
D408	8-719-050-48	DIODE RB441Q-40T-77	
D501	8-719-404-50	DIODE MA111-TX	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-422-41	DIODE MA8051-L-TX	
D506	8-719-988-61	DIODE 1SS355TE-17	
D507	8-719-820-05	DIODE 1SS181	
D508	8-719-404-50	DIODE MA111-TX	
D509	8-719-404-50	DIODE MA111-TX	
D510	8-719-988-61	DIODE 1SS355TE-17	
D601	8-719-988-61	DIODE 1SS355TE-17	
D602	8-719-017-95	DIODE MA8180-TX	
D603	8-719-422-64	DIODE MA8062-M	
D604	8-719-017-95	DIODE MA8180-TX	
D605	8-719-420-51	DIODE MA729	
D606	8-719-988-61	DIODE 1SS355TE-17	
D607	8-719-017-95	DIODE MA8180-TX	
D609	8-719-801-78	DIODE 1SS184	
D612	8-719-988-61	DIODE 1SS355TE-17	
D651	8-719-801-78	DIODE 1SS184	
D652	8-719-820-05	DIODE 1SS181	
D654	8-719-820-05	DIODE 1SS181	
D801	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D802	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D803	8-719-078-81	DIODE DF5A6.8FU(TE85R)	
D804	8-719-423-32	DIODE MA8120-M	
D806	8-719-977-12	DIODE DTZ6.8B	
D807	8-719-977-12	DIODE DTZ6.8B	
		< FERRITE BEAD >	
FB301	1-414-229-11	INDUCTOR, FERRITE BEAD	
FB302	1-414-229-11	INDUCTOR, FERRITE BEAD	
FB303	1-414-229-11	INDUCTOR, FERRITE BEAD	
		< IC >	
IC101	8-759-990-43	IC TL1451ACDB	
IC102	6-702-139-01	IC RN5VD59AA-TL	
IC201	8-759-909-71	IC BA4558F (AEP,UK)	
IC202	8-759-492-59	IC SAA6588T-118 (AEP,UK)	
IC301	8-759-422-21	IC NJM4580V(TE2)	
IC302	8-759-422-21	IC NJM4580V(TE2)	
IC305	8-759-827-13	IC TDA7406T	
IC309	8-759-827-14	IC TA8268AH	
IC310	8-759-422-21	IC NJM4580V(TE2)	

MAIN

Ref. No.	Part No.	Description	Remark
IC401	8-759-447-94	IC NJU7201U32	
IC402	8-759-641-26	IC NJM2391DL1-33(TE1)	
IC411	8-759-524-27	IC TC74VHC244FT(EL)	
IC501	6-801-482-01	IC MB90574CPMT-G-361-BNDE1 (AEP,UK)	
IC501	6-801-483-01	IC MB90574CPMT-G-362-BNDE1 (US,CND)	
IC502	8-759-828-22	IC XC61CN4102MR	
IC601	8-759-449-89	IC BA8270F-E2	
IC651	8-759-337-40	IC NJM2904V(TE2)	
IC652	8-759-668-14	IC PQ09DZ1U	
IC653	8-759-527-33	IC LB1930M-TLM	
IC654	8-759-527-33	IC LB1930M-TLM	
IC701	8-759-277-63	IC TC7W14FU(TE12R)	
IC702	6-801-484-01	IC HD6432398-A02	
		< JACK >	
J651	1-566-822-41	JACK (REMOTE IN)	
		< COIL >	
L100	1-412-525-31	INDUCTOR 10uH	
L101	1-419-506-11	COIL, CHOKE 150uH	
L102	1-414-392-41	INDUCTOR 1uH	
L103	1-419-506-11	COIL, CHOKE 150uH	
L104	1-414-394-41	INDUCTOR 2.2uH	
L105	1-414-394-41	INDUCTOR 2.2uH	
L106	1-412-951-11	INDUCTOR 10uH	
L201	1-216-295-00	SHORT 0	
L400	1-412-951-11	INDUCTOR 10uH	
L401	1-419-476-31	COIL, CHOKE 250uH	
L402	1-414-185-51	INDUCTOR 22uH	
L403	1-414-857-51	INDUCTOR 100uH	
L501	1-414-185-51	INDUCTOR 22uH	
L701	1-414-856-51	INDUCTOR 10uH	
		< TRANSISTOR >	
Q101	8-729-038-68	TRANSISTOR KRC103S	
Q102	8-729-038-55	TRANSISTOR KRA103S	
Q103	8-729-820-46	TRANSISTOR 2SB1202FAS	
Q105	8-729-034-49	TRANSISTOR KRC104S	
Q106	8-729-820-46	TRANSISTOR 2SB1202FAS	
Q107	8-729-038-68	TRANSISTOR KRC103S	
Q108	8-729-106-60	TRANSISTOR 2SB1115A	
Q109	8-729-106-60	TRANSISTOR 2SB1115A	
Q110	8-729-106-60	TRANSISTOR 2SB1115A	
Q111	8-729-038-68	TRANSISTOR KRC103S	
Q112	8-729-038-68	TRANSISTOR KRC103S	
Q113	8-729-040-17	TRANSISTOR 2SD2164-K	
Q116	8-729-034-49	TRANSISTOR KRC104S	
Q117	8-729-038-67	TRANSISTOR KRC102S	
Q118	8-759-068-54	TRANSISTOR WS57C291B-RE20A	
Q119	8-729-019-00	TRANSISTOR 2SD2394-G	
Q150	8-729-920-85	TRANSISTOR 2SD1664-QR	
Q160	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q201	8-729-920-85	TRANSISTOR 2SD1664-QR	

Ref. No.	Part No.	Description	Remark
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (AEP,UK)	
Q203	8-729-421-22	TRANSISTOR UN2211 (AEP,UK)	
Q301	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q302	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q303	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q304	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q305	8-729-920-21	TRANSISTOR DTC314TK-T-146	
Q310	8-729-038-56	TRANSISTOR KRA104S	
Q312	8-729-034-49	TRANSISTOR KRC104S	
Q401	8-729-049-13	TRANSISTOR UPA1853GR-9JG-E1	
Q402	8-729-038-68	TRANSISTOR KRC103S	
Q404	8-729-038-68	TRANSISTOR KRC103S	
Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q406	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q407	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q408	8-729-106-60	TRANSISTOR 2SB1115A	
Q409	8-729-038-67	TRANSISTOR KRC102S	
Q410	8-729-022-51	TRANSISTOR XN1A311-TX	
Q411	8-729-038-67	TRANSISTOR KRC102S	
Q501	8-759-068-54	TRANSISTOR WS57C291B-RE20A	
Q502	8-729-038-67	TRANSISTOR KRC102S	
Q530	8-729-038-67	TRANSISTOR KRC102S	
Q601	8-729-038-56	TRANSISTOR KRA104S	
Q602	8-729-038-56	TRANSISTOR KRA104S	
Q603	8-729-038-67	TRANSISTOR KRC102S	
Q604	8-729-038-67	TRANSISTOR KRC102S	
		< RESISTOR >	
R43	1-216-864-11	METAL CHIP 0 5% 1/16W	
R44	1-216-864-11	METAL CHIP 0 5% 1/16W	
R45	1-216-864-11	METAL CHIP 0 5% 1/16W	
R46	1-216-864-11	METAL CHIP 0 5% 1/16W	
R101	1-216-809-11	METAL CHIP 100 5% 1/16W	
R102	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R103	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R104	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R105	1-216-811-11	METAL CHIP 150 5% 1/16W	
R106	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R107	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
R108	1-218-865-11	METAL CHIP 5.6K 0.5% 1/10W	
R109	1-218-847-11	METAL CHIP 1K 0.5% 1/10W	
R110	1-218-873-11	METAL CHIP 12K 0.5% 1/10W	
R111	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R112	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R113	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R114	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R115	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R116	1-218-897-11	METAL CHIP 120K 0.5% 1/10W	
R117	1-216-864-11	METAL CHIP 0 5% 1/16W	
R118	1-216-809-11	METAL CHIP 100 5% 1/16W	
R119	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R120	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R121	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R122	1-216-809-11	METAL CHIP	100	5%	1/16W
R123	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R124	1-216-845-11	METAL CHIP	100K	5%	1/16W
R125	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R126	1-218-866-11	METAL CHIP	6.2K	0.5%	1/10W
R127	1-216-845-11	METAL CHIP	100K	5%	1/16W
R128	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R129	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R130	1-216-845-11	METAL CHIP	100K	5%	1/16W
R131	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R133	1-216-837-11	METAL CHIP	22K	5%	1/16W
R134	1-216-821-11	METAL CHIP	1K	5%	1/16W
R137	1-216-841-11	METAL CHIP	47K	5%	1/16W
R138	1-216-821-11	METAL CHIP	1K	5%	1/16W
R140	1-216-864-11	METAL CHIP	0	5%	1/16W
R141	1-216-845-11	METAL CHIP	100K	5%	1/16W
R150	1-216-013-11	RES-CHIP	33	5%	1/10W
R160	1-216-025-11	RES-CHIP	100	5%	1/10W
R201	1-216-001-00	METAL CHIP	10	5%	1/10W
R202	1-216-864-11	METAL CHIP	0	5%	1/16W
R203	1-216-864-11	METAL CHIP	0	5%	1/16W
R204	1-216-817-11	METAL CHIP	470	5%	1/16W
R205	1-216-833-11	METAL CHIP	10K	5%	1/16W (AEP,UK)
R206	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK)
R207	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK)
R208	1-216-845-11	METAL CHIP	100K	5%	1/16W (AEP,UK)
R209	1-216-864-11	METAL CHIP	0	5%	1/16W (AEP,UK)
R210	1-216-833-11	METAL CHIP	10K	5%	1/16W (AEP,UK)
R211	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK)
R212	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (AEP,UK)
R213	1-216-857-11	METAL CHIP	1M	5%	1/16W (AEP,UK)
R214	1-216-809-11	METAL CHIP	100	5%	1/16W (AEP,UK)
R215	1-216-853-11	METAL CHIP	470K	5%	1/16W (AEP,UK)
R216	1-216-817-11	METAL CHIP	470	5%	1/16W (AEP,UK)
R217	1-216-797-11	METAL CHIP	10	5%	1/16W (AEP,UK)
R218	1-216-823-11	METAL CHIP	1.5K	5%	1/16W (AEP,UK)
R219	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP,UK)
R220	1-216-797-11	METAL CHIP	10	5%	1/16W (AEP,UK)
R222	1-216-864-11	METAL CHIP	0	5%	1/16W
R301	1-216-821-11	METAL CHIP	1K	5%	1/16W
R302	1-216-833-11	METAL CHIP	10K	5%	1/16W
R304	1-216-833-11	METAL CHIP	10K	5%	1/16W
R305	1-216-864-11	METAL CHIP	0	5%	1/16W
R306	1-216-864-11	METAL CHIP	0	5%	1/16W
R307	1-216-833-11	METAL CHIP	10K	5%	1/16W
R308	1-216-833-11	METAL CHIP	10K	5%	1/16W
R309	1-216-833-11	METAL CHIP	10K	5%	1/16W
R310	1-216-833-11	METAL CHIP	10K	5%	1/16W
R311	1-216-864-11	METAL CHIP	0	5%	1/16W
R312	1-216-821-11	METAL CHIP	1K	5%	1/16W
R313	1-216-833-11	METAL CHIP	10K	5%	1/16W
R314	1-216-809-11	METAL CHIP	100	5%	1/16W
R315	1-216-864-11	METAL CHIP	0	5%	1/16W
R316	1-216-833-11	METAL CHIP	10K	5%	1/16W
R317	1-216-841-11	METAL CHIP	47K	5%	1/16W
R324	1-216-841-11	METAL CHIP	47K	5%	1/16W
R325	1-216-809-11	METAL CHIP	100	5%	1/16W
R326	1-216-809-11	METAL CHIP	100	5%	1/16W
R327	1-216-841-11	METAL CHIP	47K	5%	1/16W
R329	1-216-841-11	METAL CHIP	47K	5%	1/16W
R330	1-216-833-11	METAL CHIP	10K	5%	1/16W
R331	1-216-864-11	METAL CHIP	0	5%	1/16W
R335	1-216-833-11	METAL CHIP	10K	5%	1/16W
R338	1-216-809-11	METAL CHIP	100	5%	1/16W
R339	1-216-833-11	METAL CHIP	10K	5%	1/16W
R340	1-216-833-11	METAL CHIP	10K	5%	1/16W
R341	1-216-809-11	METAL CHIP	100	5%	1/16W
R342	1-216-841-11	METAL CHIP	47K	5%	1/16W
R356	1-216-813-11	METAL CHIP	220	5%	1/16W
R357	1-216-813-11	METAL CHIP	220	5%	1/16W
R358	1-216-813-11	METAL CHIP	220	5%	1/16W
R360	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R361	1-216-813-11	METAL CHIP	220	5%	1/16W
R363	1-216-845-11	METAL CHIP	100K	5%	1/16W
R364	1-216-813-11	METAL CHIP	220	5%	1/16W
R371	1-216-864-11	METAL CHIP	0	5%	1/16W
R372	1-216-809-11	METAL CHIP	100	5%	1/16W
R373	1-216-809-11	METAL CHIP	100	5%	1/16W
R374	1-216-841-11	METAL CHIP	47K	5%	1/16W
R376	1-216-841-11	METAL CHIP	47K	5%	1/16W
R377	1-216-864-11	METAL CHIP	0	5%	1/16W
R379	1-216-805-11	METAL CHIP	47	5%	1/16W
R380	1-216-841-11	METAL CHIP	47K	5%	1/16W
R382	1-216-817-11	METAL CHIP	470	5%	1/16W
R383	1-216-295-00	SHORT	0		
R384	1-216-295-00	SHORT	0		
R385	1-216-025-11	RES-CHIP	100	5%	1/10W
R389	1-216-864-11	METAL CHIP	0	5%	1/16W
R390	1-216-841-11	METAL CHIP	47K	5%	1/16W
R391	1-216-821-11	METAL CHIP	1K	5%	1/16W
R392	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R393	1-216-821-11	METAL CHIP	1K	5%	1/16W
R394	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R395	1-216-821-11	METAL CHIP	1K	5%	1/16W
R396	1-216-295-00	SHORT	0		
R397	1-216-821-11	METAL CHIP	1K	5%	1/16W
R398	1-216-073-00	RES-CHIP	10K	5%	1/10W
R399	1-216-073-00	RES-CHIP	10K	5%	1/10W
R401	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R402	1-216-821-11	METAL CHIP	1K	5%	1/16W
R403	1-216-073-00	RES-CHIP	10K	5%	1/10W
R404	1-216-073-00	RES-CHIP	10K	5%	1/10W
R405	1-216-073-00	RES-CHIP	10K	5%	1/10W
R406	1-216-073-00	RES-CHIP	10K	5%	1/10W
R409	1-216-073-00	RES-CHIP	10K	5%	1/10W
R410	1-216-073-00	RES-CHIP	10K	5%	1/10W
R411	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R413	1-216-841-11	METAL CHIP	47K	5%	1/16W
R414	1-216-841-11	METAL CHIP	47K	5%	1/16W
R415	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R416	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R417	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R418	1-216-833-11	METAL CHIP	10K	5%	1/16W
R419	1-216-833-11	METAL CHIP	10K	5%	1/16W
R420	1-216-841-11	METAL CHIP	47K	5%	1/16W
R421	1-216-837-11	METAL CHIP	22K	5%	1/16W
R422	1-216-845-11	METAL CHIP	100K	5%	1/16W
R423	1-216-833-11	METAL CHIP	10K	5%	1/16W
R424	1-216-833-11	METAL CHIP	10K	5%	1/16W
R425	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R426	1-216-833-11	METAL CHIP	10K	5%	1/16W
R427	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R428	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R432	1-216-864-11	METAL CHIP	0	5%	1/16W
R433	1-216-864-11	METAL CHIP	0	5%	1/16W
R500	1-216-864-11	METAL CHIP	0	5%	1/16W (AEP,UK)
R501	1-216-837-11	METAL CHIP	22K	5%	1/16W
R502	1-216-821-11	METAL CHIP	1K	5%	1/16W
R503	1-216-833-11	METAL CHIP	10K	5%	1/16W
R504	1-216-833-11	METAL CHIP	10K	5%	1/16W
R505	1-216-845-11	METAL CHIP	100K	5%	1/16W
R506	1-216-833-11	METAL CHIP	10K	5%	1/16W
R507	1-216-833-11	METAL CHIP	10K	5%	1/16W
R508	1-216-845-11	METAL CHIP	100K	5%	1/16W
R509	1-216-821-11	METAL CHIP	1K	5%	1/16W
R510	1-216-821-11	METAL CHIP	1K	5%	1/16W
R511	1-216-864-11	METAL CHIP	0	5%	1/16W
R512	1-216-815-11	METAL CHIP	330	5%	1/16W
R513	1-216-821-11	METAL CHIP	1K	5%	1/16W
R514	1-216-841-11	METAL CHIP	47K	5%	1/16W
R515	1-216-821-11	METAL CHIP	1K	5%	1/16W
R516	1-216-864-11	METAL CHIP	0	5%	1/16W
R517	1-216-821-11	METAL CHIP	1K	5%	1/16W
R518	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R519	1-216-813-11	METAL CHIP	220	5%	1/16W
R520	1-216-821-11	METAL CHIP	1K	5%	1/16W
R521	1-216-845-11	METAL CHIP	100K	5%	1/16W
R522	1-216-845-11	METAL CHIP	100K	5%	1/16W
R523	1-216-845-11	METAL CHIP	100K	5%	1/16W
R525	1-216-845-11	METAL CHIP	100K	5%	1/16W
R526	1-216-845-11	METAL CHIP	100K	5%	1/16W
R527	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R528	1-216-845-11	METAL CHIP	100K	5%	1/16W
R533	1-216-845-11	METAL CHIP	100K	5%	1/16W
R536	1-216-845-11	METAL CHIP	100K	5%	1/16W
R537	1-216-845-11	METAL CHIP	100K	5%	1/16W
R539	1-216-845-11	METAL CHIP	100K	5%	1/16W
R540	1-216-849-11	METAL CHIP	220K	5%	1/16W
R541	1-216-849-11	METAL CHIP	220K	5%	1/16W
R542	1-216-845-11	METAL CHIP	100K	5%	1/16W
R543	1-216-849-11	METAL CHIP	220K	5%	1/16W
R544	1-216-853-11	METAL CHIP	470K	5%	1/16W
R545	1-216-845-11	METAL CHIP	100K	5%	1/16W
R546	1-216-845-11	METAL CHIP	100K	5%	1/16W
R547	1-216-849-11	METAL CHIP	220K	5%	1/16W
R548	1-216-849-11	METAL CHIP	220K	5%	1/16W
R550	1-216-821-11	METAL CHIP	1K	5%	1/16W
R551	1-216-821-11	METAL CHIP	1K	5%	1/16W
R552	1-216-821-11	METAL CHIP	1K	5%	1/16W
R553	1-216-817-11	METAL CHIP	470	5%	1/16W
R561	8-719-050-48	DIODE RB441Q-40T-77			
R585	1-216-821-11	METAL CHIP	1K	5%	1/16W
R601	1-216-841-11	METAL CHIP	47K	5%	1/16W
R602	1-216-809-11	METAL CHIP	100	5%	1/16W
R603	1-216-809-11	METAL CHIP	100	5%	1/16W
R604	1-216-835-11	METAL CHIP	15K	5%	1/16W
R605	1-216-821-11	METAL CHIP	1K	5%	1/16W
R606	1-216-809-11	METAL CHIP	100	5%	1/16W
R607	1-216-809-11	METAL CHIP	100	5%	1/16W
R608	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R651	1-216-845-11	METAL CHIP	100K	5%	1/16W
R656	1-216-833-11	METAL CHIP	10K	5%	1/16W
R657	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R659	1-216-833-11	METAL CHIP	10K	5%	1/16W
R660	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R661	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R662	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R663	1-216-845-11	METAL CHIP	100K	5%	1/16W
R664	1-218-236-11	RES-CHIP	1	10%	1/4W
R665	1-218-236-11	RES-CHIP	1	10%	1/4W
R666	1-218-236-11	RES-CHIP	1	10%	1/4W
R667	1-218-236-11	RES-CHIP	1	10%	1/4W
R701	1-216-821-11	METAL CHIP	1K	5%	1/16W
R702	1-216-821-11	METAL CHIP	1K	5%	1/16W
R706	1-216-813-11	METAL CHIP	220	5%	1/16W (AEP,UK)
R706	1-500-329-21	INDUCTOR, FERRITE BEAD (US,CND)			

Ref. No.	Part No.	Description			Remark
R707	1-216-817-11	METAL CHIP	470	5%	1/16W (AEP,UK)
R707	1-500-329-21	INDUCTOR, FERRITE BEAD (US,CND)			
R708	1-216-821-11	METAL CHIP	1K	5%	1/16W
R709	1-216-864-11	METAL CHIP	0	5%	1/16W
R712	1-216-845-11	METAL CHIP	100K	5%	1/16W
R713	1-216-864-11	METAL CHIP	0	5%	1/16W
R714	1-216-821-11	METAL CHIP	1K	5%	1/16W
R715	1-216-864-11	METAL CHIP	0	5%	1/16W
R716	1-216-821-11	METAL CHIP	1K	5%	1/16W
R717	1-216-845-11	METAL CHIP	100K	5%	1/16W
R718	1-216-845-11	METAL CHIP	100K	5%	1/16W
R719	1-216-845-11	METAL CHIP	100K	5%	1/16W
R722	1-216-845-11	METAL CHIP	100K	5%	1/16W
R725	1-216-821-11	METAL CHIP	1K	5%	1/16W
R727	1-216-845-11	METAL CHIP	100K	5%	1/16W
R801	1-216-821-11	METAL CHIP	1K	5%	1/16W
R802	1-216-809-11	METAL CHIP	100	5%	1/16W
R803	1-216-809-11	METAL CHIP	100	5%	1/16W
R804	1-216-809-11	METAL CHIP	100	5%	1/16W
R805	1-216-809-11	METAL CHIP	100	5%	1/16W
R806	1-216-809-11	METAL CHIP	100	5%	1/16W
R807	1-216-809-11	METAL CHIP	100	5%	1/16W
R808	1-216-821-11	METAL CHIP	1K	5%	1/16W
R809	1-216-809-11	METAL CHIP	100	5%	1/16W
R810	1-216-809-11	METAL CHIP	100	5%	1/16W
R811	1-216-821-11	METAL CHIP	1K	5%	1/16W
R812	1-216-864-11	METAL CHIP	0	5%	1/16W
R813	1-216-845-11	METAL CHIP	100K	5%	1/16W
R814	1-216-845-11	METAL CHIP	100K	5%	1/16W
R815	1-216-845-11	METAL CHIP	100K	5%	1/16W
R816	1-216-845-11	METAL CHIP	100K	5%	1/16W
R817	1-218-716-11	METAL CHIP	10K	0.5%	1/16W
R818	1-216-841-11	METAL CHIP	47K	5%	1/16W
R819	1-216-845-11	METAL CHIP	100K	5%	1/16W
R820	1-216-821-11	METAL CHIP	1K	5%	1/16W
R821	1-216-819-11	METAL CHIP	680	5%	1/16W
		< THERMISTOR (POSITIVE) >			
TH101	1-810-940-11	THERMISTOR, POSITIVE			
TH102	1-810-940-11	THERMISTOR, POSITIVE			
TH501	1-810-812-21	THERMISTOR, NTC (1608)			
TH601	1-801-792-21	THERMISTOR, POSITIVE			
		< TUNER >			
TUX201	A-3282-062-A	TUNER UNIT (TUX-020)			
		< VIBRATOR >			
X201	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP,UK)			
X501	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X503	1-767-993-31	VIBRATOR, CRYSTAL (3.68MHz)			
X701	1-781-822-21	VIBRATOR, CERAMIC (18.432MHz)			
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Ref. No.	Part No.	Description			Remark
	A-3340-216-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-110-569-21	TANTAL. CHIP	47uF	20%	4V
C2	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C3	1-110-569-21	TANTAL. CHIP	47uF	20%	4V
C4	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C7	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C8	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C9	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C10	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C12	1-110-569-21	TANTAL. CHIP	47uF	20%	4V
C13	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C14	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C15	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C16	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C17	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C19	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C21	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C22	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C23	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C25	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C27	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C28	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C29	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C30	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C31	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C32	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C34	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C35	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C36	1-104-852-11	TANTAL. CHIP	22uF	20%	6.3V
C37	1-104-852-11	TANTAL. CHIP	22uF	20%	6.3V
C38	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C39	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C40	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C42	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C45	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C47	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C48	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C49	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C50	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C51	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C56	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C57	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C58	1-216-864-11	METAL CHIP	0	5%	1/16W

SERVO

Ref. No.	Part No.	Description			Remark
C59	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C60	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C61	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C62	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C63	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C64	1-162-925-11	CERAMIC CHIP	68PF	5%	50V
C65	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C66	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C67	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C68	1-104-913-11	TANTAL. CHIP	10uF	20%	16V
C70	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C71	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C72	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C73	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C74	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C75	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C76	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C77	1-104-852-11	TANTAL. CHIP	22uF	20%	6.3V
C79	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C82	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C89	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C90	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C91	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C93	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C96	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C101	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C107	1-135-856-11	TANTAL. CHIP	100uF	20%	10V
C108	1-119-751-11	TANTAL. CHIP	22uF	20%	16V
C109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C121	1-115-156-11	CERAMIC CHIP	1uF		10V
C122	1-115-156-11	CERAMIC CHIP	1uF		10V
C123	1-115-156-11	CERAMIC CHIP	1uF		10V
C124	1-115-156-11	CERAMIC CHIP	1uF		10V
		< CONNECTOR >			
CN1	1-691-351-11	CONNECTOR, FFC/FPC (ZIF) 13P			
CN2	1-784-342-11	HOUSING, CONNECTOR 2P			
CN3	1-784-342-21	HOUSING, CONNECTOR 2P			
CN4	1-794-501-11	CONNECTOR, FFC/FPC (ZIF) 4P			
* CN6	1-691-368-21	CONNECTOR, FFC/FPC (ZIF) 30P			
CN7	1-691-372-21	CONNECTOR, FFC/FPC (ZIF) 8P			
		< DIODE >			
D2	8-719-052-72	LED CL-220HR-C (SIDE ILLUMI)			
D3	8-719-072-70	DIODE MA2ZD14001S0			
D4	8-719-052-72	LED CL-220HR-C (CD WINDOW)			
D5	8-719-052-72	LED CL-220HR-C (▶)			
D6	8-719-052-72	LED CL-220HR-C (OPEN/CLOSE)			

Ref. No.	Part No.	Description	Remark
D7	8-719-052-72	LED CL-220HR-C (SIDE ILLUMI)	
D8	8-719-801-78	DIODE 1SS184	
D9	8-719-404-50	DIODE MA111-TX	
D14	8-719-083-58	DIODE UDZS-TE-17-3.9B	
D15	8-719-083-58	DIODE UDZS-TE-17-3.9B	
D16	8-719-083-58	DIODE UDZS-TE-17-3.9B	
D17	8-719-083-58	DIODE UDZS-TE-17-3.9B	
D18	8-719-404-50	DIODE MA111-TX	
D19	8-719-404-50	DIODE MA111-TX	
D22	8-719-404-50	DIODE MA111-TX	
D25	8-719-404-50	DIODE MA111-TX	
D26	8-719-404-50	DIODE MA111-TX	
		< FERRITE BEAD >	
FB1	1-500-329-21	INDUCTOR, FERRITE BEAD	
FB2	1-500-329-21	INDUCTOR, FERRITE BEAD	
		< IC >	
IC1	8-752-398-18	IC CXD3027R	
IC2	8-752-089-74	IC CXA2581N-T4	
IC3	8-759-681-42	IC NJM12902V(TE2)	
IC4	6-700-296-01	IC W24L010AT-12-EL15	
IC5	6-700-297-01	IC CXD9684R-004	
IC6	8-759-538-44	IC MSM51V17400D-10TK-FS	
IC7	8-759-577-33	IC RN5RZ20BA-TR	
IC8	8-759-685-74	IC BH6518FS-E2	
IC9	8-759-594-55	IC TC75S57F(TE85R)	
IC10	8-759-287-60	IC TC7SH08FU-TE85L	
IC11	6-801-171-01	IC HD6432238RWN13TEI	
IC12	8-759-645-31	IC RN5RZ25BA-TL	
IC13	8-759-287-60	IC TC7SH08FU-TE85L	
IC14	8-759-196-97	IC TC7SH32FU-TE85R	
IC15	8-759-096-87	IC TC7WU04FU(TE12R)	
		< COIL >	
L1	1-414-398-11	INDUCTOR 10uH	
L2	1-414-398-11	INDUCTOR 10uH	
L3	1-414-398-11	INDUCTOR 10uH	
L4	1-412-006-31	INDUCTOR 10uH	
L5	1-414-398-11	INDUCTOR 10uH	
L6	1-414-398-11	INDUCTOR 10uH	
L7	1-412-006-31	INDUCTOR 10uH	
L8	1-414-398-11	INDUCTOR 10uH	
L10	1-400-145-21	INDUCTOR 47uH	
L11	1-469-757-21	INDUCTOR 10uH	
L12	1-400-145-21	INDUCTOR 47uH	
L13	1-400-145-21	INDUCTOR 47uH	
		< TRANSISTOR >	
Q1	8-729-141-48	TRANSISTOR 2SB624-BV345	
Q2	8-729-421-22	TRANSISTOR UN2211	
Q3	8-729-021-94	FET 2SK1657-T1B	
Q5	8-729-421-22	TRANSISTOR UN2211	

Ref. No.	Part No.	Description			Remark
Q6	8-729-420-20	TRANSISTOR XN4312			
		< RESISTOR >			
R1	1-216-801-11	METAL CHIP	22	5%	1/16W
R2	1-216-801-11	METAL CHIP	22	5%	1/16W
R3	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R4	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R5	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R6	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R7	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R8	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R9	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R10	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R11	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R12	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R13	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R14	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R15	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R16	1-218-887-11	METAL CHIP	47K	0.5%	1/10W
R17	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R18	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R19	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R20	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R21	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R22	1-218-866-11	METAL CHIP	6.2K	0.5%	1/10W
R23	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R24	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R25	1-216-833-11	METAL CHIP	10K	5%	1/16W
R26	1-216-833-11	METAL CHIP	10K	5%	1/16W
R27	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R28	1-216-841-11	METAL CHIP	47K	5%	1/16W
R29	1-216-833-11	METAL CHIP	10K	5%	1/16W
R30	1-216-833-11	METAL CHIP	10K	5%	1/16W
R31	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R32	1-216-849-11	METAL CHIP	220K	5%	1/16W
R34	1-216-833-11	METAL CHIP	10K	5%	1/16W
R35	1-216-841-11	METAL CHIP	47K	5%	1/16W
R36	1-216-809-11	METAL CHIP	100	5%	1/16W
R38	1-216-839-11	METAL CHIP	33K	5%	1/16W
R40	1-216-864-11	METAL CHIP	0	5%	1/16W
R41	1-216-839-11	METAL CHIP	33K	5%	1/16W
R43	1-216-839-11	METAL CHIP	33K	5%	1/16W
R44	1-216-833-11	METAL CHIP	10K	5%	1/16W
R45	1-216-851-11	METAL CHIP	330K	5%	1/16W
R46	1-216-857-11	METAL CHIP	1M	5%	1/16W
R47	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R48	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R49	1-216-833-11	METAL CHIP	10K	5%	1/16W
R50	1-216-853-11	METAL CHIP	470K	5%	1/16W
R51	1-216-833-11	METAL CHIP	10K	5%	1/16W
R52	1-216-864-11	METAL CHIP	0	5%	1/16W
R53	1-216-864-11	METAL CHIP	0	5%	1/16W
R54	1-216-818-11	METAL CHIP	560	5%	1/16W
R55	1-216-809-11	METAL CHIP	100	5%	1/16W
R56	1-216-837-11	METAL CHIP	22K	5%	1/16W
R58	1-216-837-11	METAL CHIP	22K	5%	1/16W
R59	1-216-845-11	METAL CHIP	100K	5%	1/16W
R60	1-216-845-11	METAL CHIP	100K	5%	1/16W
R61	1-216-809-11	METAL CHIP	100	5%	1/16W
R62	1-216-837-11	METAL CHIP	22K	5%	1/16W
R64	1-216-837-11	METAL CHIP	22K	5%	1/16W
R66	1-216-864-11	METAL CHIP	0	5%	1/16W
R67	1-216-845-11	METAL CHIP	100K	5%	1/16W
R68	1-216-857-11	METAL CHIP	1M	5%	1/16W
R69	1-216-814-11	METAL CHIP	270	5%	1/16W
R70	1-216-814-11	METAL CHIP	270	5%	1/16W
R71	1-216-833-11	METAL CHIP	10K	5%	1/16W
R72	1-216-821-11	METAL CHIP	1K	5%	1/16W
R74	1-216-833-11	METAL CHIP	10K	5%	1/16W
R75	1-216-845-11	METAL CHIP	100K	5%	1/16W
R77	1-216-841-11	METAL CHIP	47K	5%	1/16W
R78	1-218-694-11	METAL CHIP	1.2K	0.5%	1/16W
R79	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R81	1-216-845-11	METAL CHIP	100K	5%	1/16W
R82	1-216-845-11	METAL CHIP	100K	5%	1/16W
R83	1-216-845-11	METAL CHIP	100K	5%	1/16W
R84	1-216-845-11	METAL CHIP	100K	5%	1/16W
R85	1-216-845-11	METAL CHIP	100K	5%	1/16W
R86	1-216-845-11	METAL CHIP	100K	5%	1/16W
R87	1-216-845-11	METAL CHIP	100K	5%	1/16W
R88	1-216-845-11	METAL CHIP	100K	5%	1/16W
R89	1-216-845-11	METAL CHIP	100K	5%	1/16W
R90	1-216-845-11	METAL CHIP	100K	5%	1/16W
R91	1-216-845-11	METAL CHIP	100K	5%	1/16W
R92	1-216-845-11	METAL CHIP	100K	5%	1/16W
R93	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R94	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R95	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R96	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R97	1-216-837-11	METAL CHIP	22K	5%	1/16W
R99	1-216-857-11	METAL CHIP	1M	5%	1/16W
R100	1-216-841-11	METAL CHIP	47K	5%	1/16W
R102	1-216-809-11	METAL CHIP	100	5%	1/16W
R103	1-216-864-11	METAL CHIP	0	5%	1/16W
R104	1-216-809-11	METAL CHIP	100	5%	1/16W
R105	1-216-809-11	METAL CHIP	100	5%	1/16W
R107	1-216-845-11	METAL CHIP	100K	5%	1/16W
R109	1-216-845-11	METAL CHIP	100K	5%	1/16W
R111	1-216-845-11	METAL CHIP	100K	5%	1/16W
R113	1-216-845-11	METAL CHIP	100K	5%	1/16W
R115	1-216-845-11	METAL CHIP	100K	5%	1/16W
R116	1-216-845-11	METAL CHIP	100K	5%	1/16W
R117	1-216-821-11	METAL CHIP	1K	5%	1/16W
R118	1-216-817-11	METAL CHIP	470	5%	1/16W
R119	1-220-397-11	RES-CHIP	4.7M	5%	1/10W
R120	1-216-845-11	METAL CHIP	100K	5%	1/16W

SERVO | SWITCH

Ref. No.	Part No.	Description			Remark
R121	1-216-845-11	METAL CHIP	100K	5%	1/16W
R122	1-216-833-11	METAL CHIP	10K	5%	1/16W
R123	1-216-833-11	METAL CHIP	10K	5%	1/16W
R124	1-216-845-11	METAL CHIP	100K	5%	1/16W
R125	1-216-845-11	METAL CHIP	100K	5%	1/16W
R127	1-216-845-11	METAL CHIP	100K	5%	1/16W
R128	1-216-864-11	METAL CHIP	0	5%	1/16W
R129	1-216-845-11	METAL CHIP	100K	5%	1/16W
R130	1-216-845-11	METAL CHIP	100K	5%	1/16W
R131	1-216-821-11	METAL CHIP	1K	5%	1/16W
R132	1-216-821-11	METAL CHIP	1K	5%	1/16W
R133	1-216-041-00	METAL CHIP	470	5%	1/10W
R134	1-216-037-00	METAL CHIP	330	5%	1/10W
R135	1-216-037-00	METAL CHIP	330	5%	1/10W
R136	1-216-845-11	METAL CHIP	100K	5%	1/16W
R137	1-216-845-11	METAL CHIP	100K	5%	1/16W
R138	1-216-819-11	METAL CHIP	680	5%	1/16W
R139	1-216-845-11	METAL CHIP	100K	5%	1/16W
R140	1-216-845-11	METAL CHIP	100K	5%	1/16W
R141	1-216-845-11	METAL CHIP	100K	5%	1/16W
R142	1-216-845-11	METAL CHIP	100K	5%	1/16W
R143	1-216-845-11	METAL CHIP	100K	5%	1/16W
R144	1-216-841-11	METAL CHIP	47K	5%	1/16W
R146	1-216-864-11	METAL CHIP	0	5%	1/16W
R149	1-216-864-11	METAL CHIP	0	5%	1/16W
R150	1-216-864-11	METAL CHIP	0	5%	1/16W
R151	1-216-864-11	METAL CHIP	0	5%	1/16W
R152	1-216-857-11	METAL CHIP	1M	5%	1/16W
R154	1-216-864-11	METAL CHIP	0	5%	1/16W
R156	1-216-864-11	METAL CHIP	0	5%	1/16W
R157	1-216-817-11	METAL CHIP	470	5%	1/16W
R158	1-216-817-11	METAL CHIP	470	5%	1/16W
R159	1-216-817-11	METAL CHIP	470	5%	1/16W
R160	1-216-817-11	METAL CHIP	470	5%	1/16W
R161	1-216-864-11	METAL CHIP	0	5%	1/16W
R162	1-216-817-11	METAL CHIP	470	5%	1/16W
R163	1-216-817-11	METAL CHIP	470	5%	1/16W
R164	1-216-817-11	METAL CHIP	470	5%	1/16W
R165	1-216-864-11	METAL CHIP	0	5%	1/16W
R167	1-216-864-11	METAL CHIP	0	5%	1/16W
		< SWITCH >			
SW1	1-692-088-51	SWITCH, TACTILE (OPEN/CLOSE)			
SW2	1-529-565-41	SWITCH, PUSH (1 KEY) (OPEN END)			
SW3	1-529-565-41	SWITCH, PUSH (1 KEY) (CLOSE END)			
SW4	1-692-088-51	SWITCH, TACTILE (►)			
		< VIBRATOR >			
X1	1-795-218-21	VIBRATOR, CERAMIC (16.934MHz)			
X2	1-795-127-21	VIBRATOR, CERAMIC (12.288MHz)			

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Ref. No.	Part No.	Description	Remark
	A-3340-310-A	SWITCH BOARD, COMPLETE (including S601,S602)	
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MISCELLANEOUS
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2	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US,CND)	
2	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	
9	1-761-522-11	FLEXIBLE BOARD	
113	1-777-246-41	CORD (WITH CONNECTOR) (ANT) (AEP,UK)	
114	1-757-775-11	CORD (WITH CONNECTOR) (SUB OUT (MONO), AUX IN) (AEP,UK)	
114	1-757-775-31	CORD (WITH CONNECTOR) (SUB OUT (MONO), AUX IN) (US,CND)	
262	1-763-734-11	MOTOR, FPC	
⚠308	X-4952-506-1	RP ASSY, DAX-23E	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
M1	A-3328-759-A	MOTOR ASSY, TURNTABLE (SPINDLE)	
M2	A-3328-627-A	MOTOR ASSY, SLED (SLED)	
M3	X-3381-240-1	MOTOR ASSY, LE (LOADING)	
M601	A-3315-488-A	MOTOR ASSY (OPEN/CLOSE)	

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ACCESSORIES
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	1-476-546-42	REMOTE COMMANDER (RM-X112) (US,CND)
	3-230-549-01	LID, BATTERY CASE (for RM-X112) (US,CND)
	3-239-019-11	NANUAL, INSTRUCTION (ENGLISH,FRENCH, GERMAN,DUTCH,ITALIAN) (AEP,UK)
	3-239-019-21	NANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH) (US,CND)
	3-239-032-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,GERMAN,DUTCH,ITALIAN) (AEP,UK)
	3-239-032-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH,SPANISH) (US,CND)
	X-3381-407-1	CASE ASSY (for FRONT PANEL)

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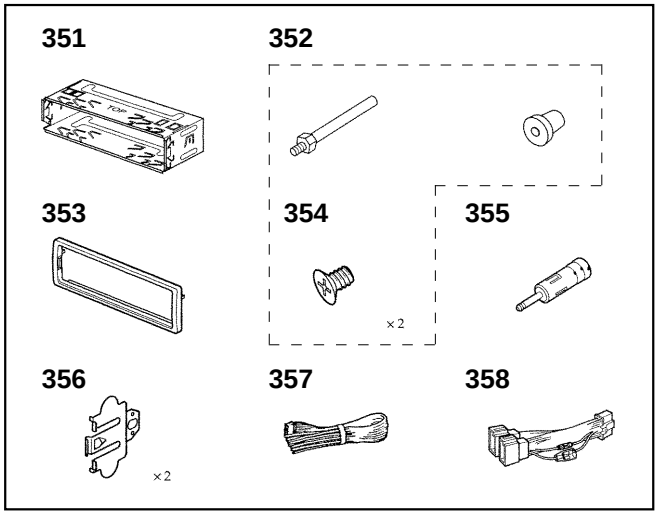
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
351	3-014-370-21	FRAME, FITTING	
352	X-3366-405-1	SCREW ASSY (EXP), FITTING (AEP,UK)	
353	3-238-544-01	COLLAR	
354	3-934-325-01	SCREW (+K 5X8 TP)	
355	1-465-459-21	ADAPTOR, ANTENNA (AEP,UK)	
356	3-030-929-04	SPRING, FITTING	
357	1-776-207-72	CORD (WITH CONNECTOR) (POWER) (US,CND)	
358	1-776-527-71	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP,UK)	



REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002. 02	New